# South Dakota Perinatal Health Risk Assessment Report 2007



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South Dakota Department of Health 600 East Capitol Avenue Pierre, South Dakota 57501

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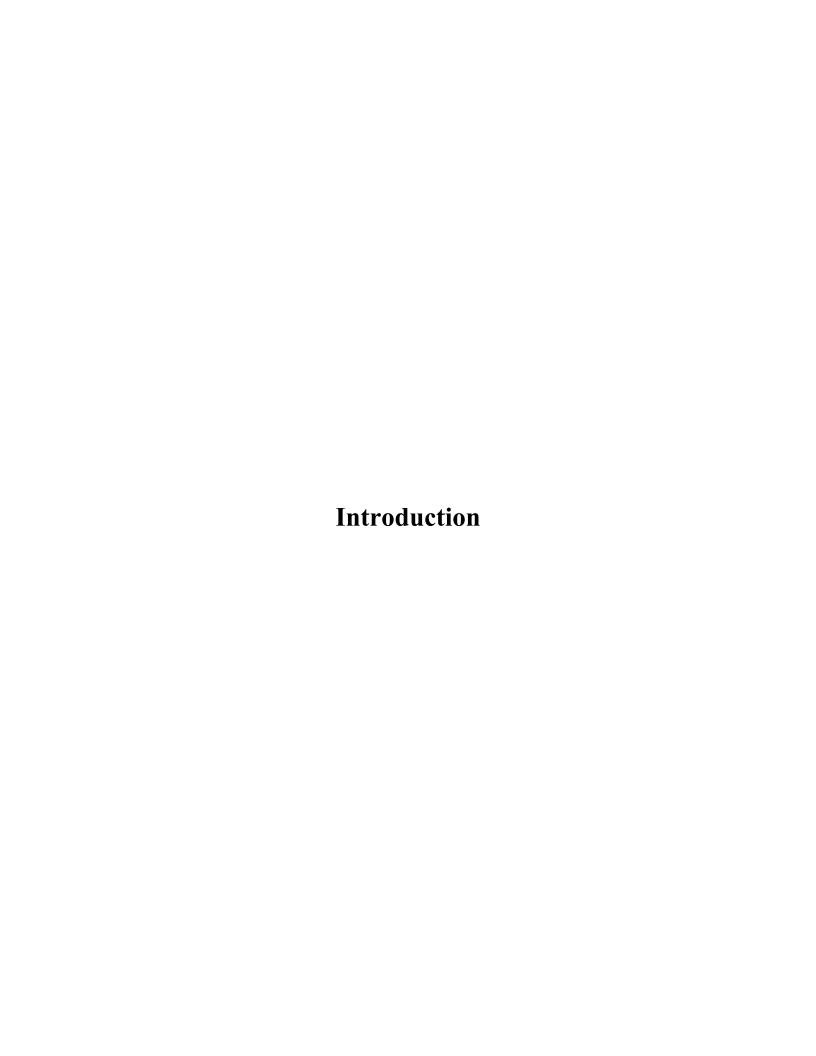
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## **Purpose**

The South Dakota Maternal and Child Health Program's mission is to provide leadership and technical assistance to assure systems that promote the health and wellbeing of women of reproductive age, infants, children, and youth, including those with special health care needs and their families.

In 1997, as part of its mission to ensure healthy women, children, and families, the South Dakota Department of Health conducted the first survey of new mothers with infants ranging in age from newborn to eight months old.

Since then this survey has been conducted every other year and was completed for the sixth time in 2007. Once again new mothers were asked questions about behaviors prior to conception such as tobacco and alcohol use and about health care and education received during the pregnancy. Babies ranged in age from newborn to eight months, so mothers were also asked about infant health care and behaviors such as car-seat use and infant sleep position. Questions on mother's drug use or possible physical abuse were added for the first time in 2007. A copy of the 2007 survey can be found in the appendix.

Questions in the survey were chosen to provide information that would help the South Dakota Department of Health develop targeted program interventions. The information should prove useful to both private and public health care providers in tailoring health care services to the needs of prenatal clients and infants in South Dakota.

#### Methods

A 66-question survey was mailed in March 2007 to 2,898 mothers who had given birth between August 2006 and January 2007; 139 were undeliverable, 896 surveys were returned, which is a return rate of 32.5 percent. The returned surveys represent 15.5 percent of resident births during this time period. It is important to remember that the information in this report is based on data that is self-reported.

# Highlights

- The pregnancies were intended by 68 percent of the mothers.
- The mothers said that 59 percent of the fathers wanted the pregnancy then or sooner. Overall, 52.3 percent of the pregnancies were intended by both parents.
- At the time of the pregnancy, nearly 82.3 percent of the respondents were not using birth control.
- Of the survey respondents, 62.4 percent reported they did take a multi-vitamin or folic acid supplement prior to pregnancy.
- The most common problem women cited about getting prenatal care was their doctor didn't want to see them until 12 weeks into their pregnancy.
- Between 82 and 85 percent of the women remember being told the signs of preterm labor and the importance of folic acid.
- Three out of four women were provided information about the harmful effects of smoking and drinking alcohol while pregnant.

# **Highlights (continued)**

- Over half or 52.8 percent of the women did not drink any alcohol in the three months prior to pregnancy.
- Prior to pregnancy 79 percent of the women surveyed did not smoke. Of those that did smoke prior to pregnancy, 54.4 percent stopped during the pregnancy.
- Only 34 percent of the women gained the recommended amount of weight while pregnant; 44.8 percent gained more than the recommended amount.
- Women said that the doctor, information from books and magazines, and previous experience with pregnancy were the most useful sources of information about being pregnant.
- Experiences with other children, talking with the child's doctor, family and friends, and a study of books and pamphlets were the most helpful sources of information in learning to care for their baby.
- Less than 1 percent of the babies, ranging in age from newborn to eight months old, had not been to the doctor for a routine well baby check-up.
- Babies were laid on their backs to sleep by 84.3 percent of the respondents.
- Smoking was not allowed in their houses or cars at all or when the baby was present by 92.7 percent of the survey mothers.

- Information about breastfeeding was received by 89 percent of the respondents and 78 percent were breastfeeding their babies when discharged from the hospital.
- When asked whether they placed their babies in car seats for travel, 96.8 percent responded "always". Another 3 percent responded "sometimes" because the baby needed feeding, diaper change, was crying, or that it takes too much time.
- Within the past year, 60.5 percent of the women had their teeth cleaned, whereas 80.6 percent did not have any problems with their teeth or gums while pregnant.
- Prior to pregnancy 32.1 percent of the respondents participated in physical activity 1 to 2 days a week. During the last three months of their pregnancy, 29.7 percent participated 1 to 2 days.



#### **Intendedness of Pregnancy**

Sixty-eight percent of survey respondents said that they intended to be pregnant then or had wanted to be pregnant sooner. When asked how the baby's father felt about the pregnancy, 59 percent of the respondents said that the father wanted the pregnancy then or sooner.

Overall, 52.3 percent of the pregnancies were intended by both parents. When the father intended the pregnancy, 88.7 percent of mothers also intended the pregnancy. When the mother intended the pregnancy, 77 percent of the fathers also wanted the pregnancy then or sooner, and an additional 16.3 percent stated that it didn't matter when the pregnancy occurred.

When each age group is analyzed, the mothers and fathers aged 30 to 34 had the highest percent of intended pregnancies at 73.9 percent and 66.9 percent, respectively. Of the mothers in this age group, 75.4 percent of their partners wanted the pregnancy then or sooner.

Of the 68 percent of respondents who intended the pregnancy then or sooner, 50.4 percent reported an income of \$50,000 or more, while 6.4 percent reported an income of less than \$20,000 a year.

## Table 1: Mother's Feelings About Being Pregnant

Wanted to be pregnant then	50.6%
Wanted to be pregnant sooner	17.4%
Unsure of feelings	14.3%
Wanted to be pregnant later	12.3%
Other	2.7%
Didn't want to be pregnant	
then or any time in the future	2.3%
Not answered	0.4%

Source: South Dakota Department of Health

# Table 2: Father's Feelings About The Pregnancy

Wanted the pregnancy then41.2%
Didn't matter when the pregnancy occurred19.4%
Wanted the pregnancy sooner17.9%
Wanted the pregnancy later10.9%
Didn't know5.4%
Didn't want the pregnancy then or any time in the future4.8%
Not answered0.4%

Source: South Dakota Department of Health

Of the mothers surveyed in 2005, aged 15 to 44, only 63.9 percent wanted the pregnancy then or sooner, compared to 68 percent in 2007.

#### Healthy People 2010

Objective 9.1 is to increase the proportion of pregnancies that are intended to 70% among females aged 15 to 44 years.

Source: U.S. Department of Health and Human Services

- ▶ The Department of Health receives funds under Title X of the Public Health Services Act to provide family planning services. These funds support the program which consists of comprehensive educational, medical and social services necessary to aid individuals in determining freely the number and spacing of their children.
- ► For further information contact Beverly Duffel, Family Planning Program Manager, South Dakota Department of Health, (605) 773-3737.

60.0% %9.05 **2**003 45.2% 50.0% **2005** □2007 40.0% 30.0% 16.9% 20.0% 10.0% 0.0% Wanted Not answered Wanted Wanted Unsure of Didn't want Other pregnancy then pregnancy sooner feelings pregnancy later pregnancy then or anytime

Figure 1: Mother's Feelings About Being Pregnant

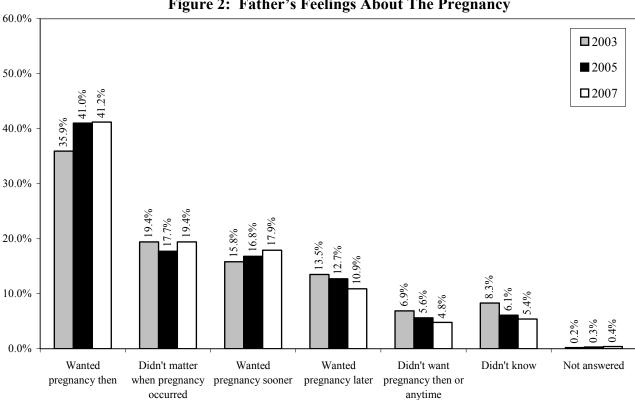


Figure 2: Father's Feelings About The Pregnancy

# Table 3: Using Birth Control at Conception

<i>No</i>	82.3%
<i>Yes</i>	16.6%
Not answered	1.1%

Source: South Dakota Department of Health

# Table 4: Post-Pregnancy Sources for Obtaining Birth Control

Private Physician/Clinic44.3%
No birth control13.7%
Tubes tied/vasectomy9.2%
Over-the-counter
(condoms, foams, etc.)9.0%
Family Planning Program/Clinic8.8%
Using natural family planning6.5%
Indian Health Service3.2%
Military Health System1.8%
Community Health Center1.5%
<i>Other1.1%</i>
USD Residency Program0.1%
<i>Not answered0.8%</i>
\

Source: South Dakota Department of Health

#### **Family Planning and Birth Control**

At the time the pregnancy occurred, 82.3 percent of the women were not using any form of birth control. The percentage of women not using birth control increased with income.

A majority or 76.1 percent of the respondents said that the reason they were not using any birth control was because they wanted to get pregnant then or sooner.

Later in the survey, women were asked where they usually obtained their birth control. The highest percentage, 44.3 percent, of women obtained birth control from a private doctor or clinic.

#### **Department of Health Activities**

▶ The Department of Health Family Planning Program provides voluntary and confidential family planning services including education, counseling, nursing, medical, ancillary and direct contraceptive services. Clinic sites include 20 sites operated by non-profit organizations under contract with the Department of Health. In addition, the Office of Community Health Services within the Department of Health operates another 27 sites. A list of these sites can be found at <a href="http://doh.sd.gov/FamilyHealth/FamilyPlanning.aspx">http://doh.sd.gov/FamilyHealth/FamilyPlanning.aspx</a>.

Figure 3: Using Birth Control at Conception

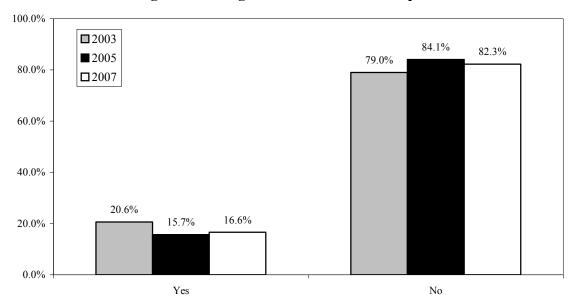
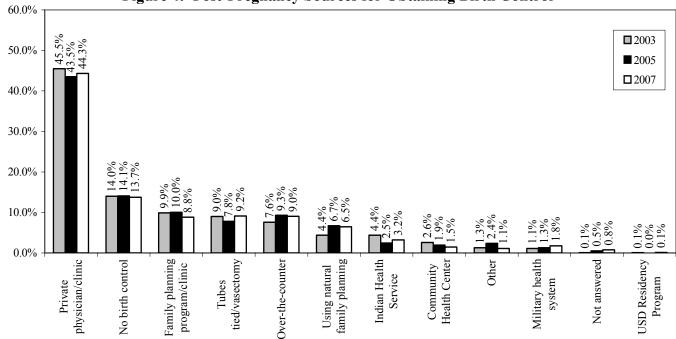


Figure 4: Post-Pregnancy Sources for Obtaining Birth Control



# Smoking Before, During and After Pregnancy

According to the 2001 report from the Surgeon General on Women and Smoking, women who smoke, like male smokers, are at increased risk of cancer, cardiovascular disease, and pulmonary disease. However females experience unique risks related to menstrual and reproductive function. Women who smoke may also have an increased risk for ectopic pregnancy, spontaneous abortion, premature rupture of membranes, abruptio placenta (placenta separation from the uterus), and placenta previa (abnormal location of the placenta), which can cause massive bleeding during delivery, and an increased risk for preterm delivery.

Adverse outcomes for the infant can include: cleft palates and cleft lips,

childhood cancers, and lower average birth weight. The longer the mother smokes during pregnancy, the greater the effect on the infant's birth weight. In addition, the risk for stillbirths and neonatal deaths and the risk for sudden infant death syndrome (SIDS) are higher for the offspring of women who smoke during pregnancy.

In the three months prior to their pregnancy 79 percent of the women stated that they did not smoke at all and 17.8 percent of the women smoked fewer than 20 cigarettes per day.

Of the women surveyed 77.2 percent were given information by a doctor, nurse or other health professional on the dangers of smoking while pregnant.

Figure 5: Number of Cigarettes Smoked Per Day
In The Three Months Prior to Pregnancy

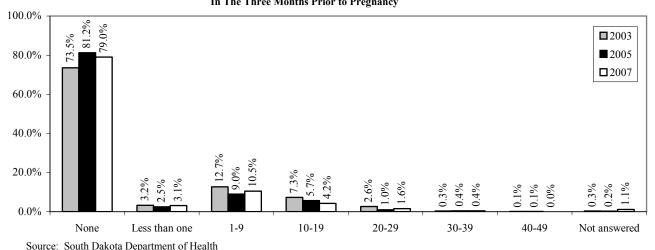
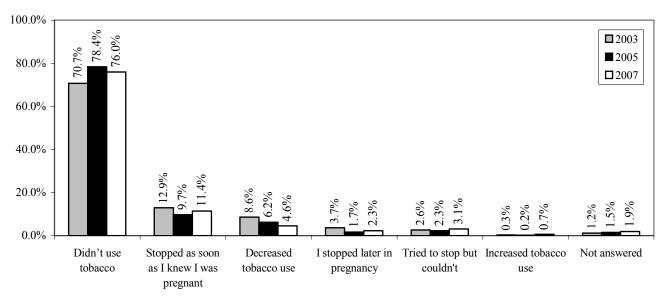


Figure 6: Tobacco Use During Pregnancy



## Healthy People 2010

Objective 27-6 is to increase smoking cessation during pregnancy to 30%.

Objective 27-9 is to reduce the proportion of children who are regularly exposed to tobacco smoke at home to 10%.

Source: U.S. Department of Health and Human Services

Reducing or stopping tobacco use can decrease the chance that the baby's development will be affected and 89.7 percent of the women said that they either stopped tobacco use completely or did not use tobacco at all during their pregnancy

Of the respondents who either quit or smoked during pregnancy, 57.1 percent were advised to quit. Of those, 51.3 percent were referred to a telephone quit line or other quit tobacco program.

The percentage of survey respondents not using tobacco during pregnancy has increased from 70.7 percent in 2003 to 76 percent in 2007.

In addition, 53.6 percent of the respondents said that a health care professional had talked to them about the effects of using chewing tobacco during pregnancy.

Table 6:	Mothers'	Smoking	Habits After
	Pregnanc	v	

<i>No</i>	87.7%
<i>Yes</i>	10.9%
Not answered	1.4%

Source: South Dakota Department of Health

An additional threat to the baby can occur when he/she is exposed to second-hand smoke. Of the women who responded to the survey, 90 percent said that smoking is not allowed at any time in the house or car compared to 85.4 percent in 2005. Only 1.6 percent said that smoking is allowed anytime in the house or car.

100.0% ■2003 87.7% 87.5% **2005** 81.2% 80.0% **2007** 60.0% 40.0% 18.5% 20.0% 11.9% 10.9% 0.0% Yes No

Figure 7: Mother's Smoking Habits After Pregnancy

Survey respondents were asked if secondhand smoke increases a baby's risk of dying from SIDS. Of the respondents, 95.8 percent knew the statement to be true while 2.5 percent thought it was false, 1.8 percent did not answer.

Of the survey respondents who knew secondhand smoke increases the risk for SIDS (95.8 percent) 1.4 percent reported that smoking is allowed anytime, anywhere in the house or car. However, of the survey respondents who believed the statement to be false (2.9 percent), 72.7 percent reported that no one smokes in the house or car at all.

Only 72 percent of the respondents said that a doctor, nurse or other health care professional had talked to them about how smoking around the baby could affect his/her health compared to almost 80 percent in 2003.

# Table 7: Smoking Behaviors Around The Baby

No one smokes in house
or car at all90.0%
No one smokes in house or
car when baby is there2.7%
No one smokes in the same
room when baby is there2.6%
<i>Other1.2%</i>
Smoking allowed anytime,
anywhere in house or car 1.6%
No one smokes in the car
when baby is there0.8%

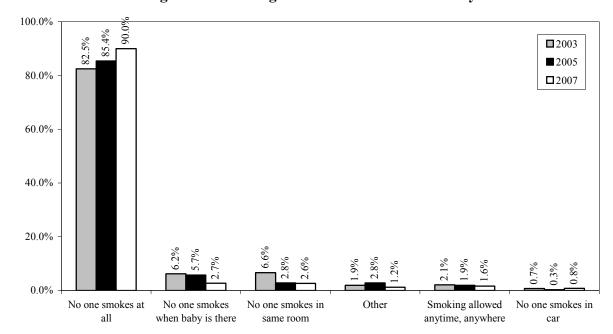


Figure 8: Smoking Behaviors Around The Baby

Findings from the National Center for Health Statistics demonstrate that women who smoke cigarettes during or after pregnancy put their babies at increased risk for SIDS. Babies exposed to smoke only after birth were twice as likely to die from SIDS as those whose mothers did not smoke at all. Mothers who smoked both during and after pregnancy tripled their baby's risk for SIDS. Recent studies have found that the risk of SIDS rises with each additional smoker in the household, the numbers of cigarettes smoked a day and the length of the infant's exposure to cigarette smoke. Components of smoke are believed to interfere with an infant's developing lungs and nervous system and to disrupt a baby's ability to wake from sleep.

- ▶ The Department of Health is the lead agency for the statewide management of programs targeted at tobacco use prevention and cessation. The Tobacco Control Program **goals** are:
  - Prevent young people from starting to use tobacco products and reduce their access to tobacco products.
  - Persuade and help smokers to stop smoking.
  - Protect nonsmokers by reducing their exposure to secondhand smoke.
- ▶ The Department of Health, Tobacco Control Program coordinates tobacco prevention and cessation efforts with WIC, Baby Care and Bright Start Home Visitation programs. Healthcare providers are encouraged to utilize the Public Health Service, Treating Tobacco Use and Dependence guidelines. Educational materials for healthcare providers and community prevention efforts are available at <a href="https://apps.sd.gov/applications/PH18Publications/secure/Puborder.asp">https://apps.sd.gov/applications/PH18Publications/secure/Puborder.asp</a>, please select Tobacco Prevention. Tobacco cessation assistance, including free coaching and assistance with nicotine withdrawal medication, is available by calling the SD QuitLine at 1-866-737-8487. More information about tobacco cessation can be found at www.healthysd.gov/QuitTobacco.

# 

Source: South Dakota Department of Health

## **Alcohol Use Before Pregnancy**

More than half or 52.3 percent of the survey respondents did not drink beer, wine, or other liquor in the three months prior to pregnancy.

When asked how many alcoholic beverages were consumed on the days they did drink, 65.4 percent of survey respondents reported two or less.

When asked about information received from a healthcare provider, 75.3 percent of women reported they were given information about the consequences of drinking alcohol during pregnancy.

In The Three Months Prior to Pregnancy 70.0% **2**003 ■2005 60.0% □2007 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 1 2 3 4 5 6 Or More None Less than Not one answered

Figure 9: Number of Days Per Week Alcohol Was Consumed

#### Table 9: Alcohol Use During Pregnancy

Never used alcohol	52.9%
Stopped as soon as I	
knew I was pregnant	43.8%
Decreased alcohol use	1.6%
Stopped later in pregnancy	0.3%
Increased use of alcohol	0.1%
Tried to stop, but couldn't	0.0%
Not answered	1.3%

Source: South Dakota Department of Health

Drinking during pregnancy can harm the developing organs such as the brain and heart and may also lead to Fetal Alcohol Syndrome (FAS). Babies with FAS are small, slow or mentally retarded, and may have deformed faces and heart problems. This is a lifetime condition. See the glossary (page 59) for more information on FAS.

#### **Alcohol Use During Pregnancy**

When a pregnant woman drinks alcohol (wine, beer or liquor) the alcohol easily passes across the placenta to the developing baby. The damage caused by the alcohol is called Fetal Alcohol Syndrome or FAS. FAS is 100 percent preventable when a pregnant woman abstains from alcohol. There is no cure for FAS. Alcohol consumption during pregnancy may also result in miscarriage, stillbirth, and premature delivery.

Over half of the women or 52.9 percent surveyed said that they did not use alcohol at all during their pregnancy, while 43.8 percent reported that they stopped consuming alcohol as soon as they knew they were pregnant.

Overall, 75.3 percent of the survey respondents remember a doctor, nurse or other health care professional giving them information on the dangers of drinking alcohol while pregnant.

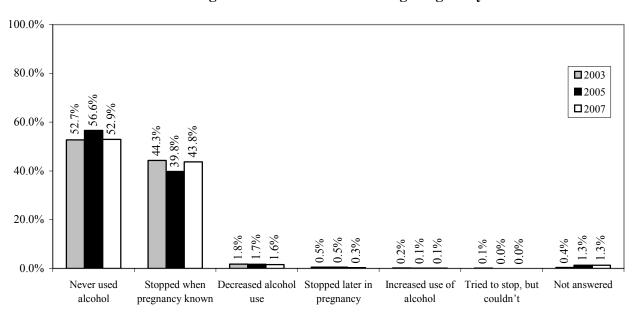


Figure 10: Alcohol Use During Pregnancy

#### Folic Acid

This member of the vitamin B family has been shown to be useful during pregnancy by helping to prevent neural tube defects in the baby.

## Table 10: Multi-Vitamin or Folic Acid Supplement Use

Yes	62.4%
No	33.0%
Didn't know I should	4.1%
Not answered	0.4%

Source: South Dakota Department of Health

#### **Vitamins and Folic Acid Supplements**

In the three months prior to pregnancy, 33 percent of the women surveyed had not taken a folic acid supplement or multivitamin with folic acid. However, 62.4 percent of the women had taken vitamins daily.

When asked about information received from a healthcare provider, 82.9 percent of the women reported they were told about the importance of folic acid in food or vitamins to help prevent birth defects.

Since the 2003 survey, multi-vitamin or folic acid supplement use has increased from 53.1 percent to 58.9 percent in 2005 and 62.4 percent in 2007. This is a 9.3 percent total increase during this time period.

# Healthy People 2010

Objective 16-16a is to increase to 80.0 percent the consumption of at least 400 micrograms of folic acid each day from fortified foods or dietary supplements by non-pregnant women aged 15-44 years.

Source: U.S. Department of Health and Human Services

# Figure 11: Multi-Vitamin or Folic Acid Supplement Use

# No 33.0% Didn't know I should 4.1% Not answered 0.4%

Source: South Dakota Department of Health

- ► The South Dakota Department of Health encourages all women of child bearing age to take folic acid. Women who participate in department programs such as WIC, Baby Care, and Family Planning are encouraged to consume folic acid daily.
- ► For further information contact Kristin Biskeborn, State Nutritionist, (605) 734-4551

#### **Oral Health**

When a pregnant woman takes care of her health, including her teeth and gums, she is helping both herself and her unborn child. By taking care of her teeth and gums, she may be giving her baby a better chance to be born on time and at a healthy birth weight.

Pregnant women with gum disease are much more likely to have premature babies with low birthweight. Scientists believe that because of gum disease, chemicals produced by the body may reach the womb, where the unborn baby is growing, causing the mother to go into labor before her baby has fully developed.

Every expectant mother should have a dental exam prior to or very early in her pregnancy. All needed dental work should be managed early, because interventions are possible to control gum disease and inflammation. This is a good opportunity to change unhealthy habits that may affect her oral health and the health of her baby.

After the baby is born, the germs that cause tooth decay can be passed to babies by their mothers or caregivers. Therefore, it is important for new mothers to maintain a healthy mouth and also to remember not to put baby's items in their own mouth or allow their baby to put their fingers into mouths of adults.

Of the 19.2 percent who reported having problems with their teeth or gums, 9.3 percent stated that their babies were either born more than 3 weeks before the due date or were underweight, while 12.7 percent of those without problems reported this.

Of the women surveyed, 64.8 percent had been to the dentist in the past year. Over half of them had their teeth cleaned and 47.3 percent remember receiving information about how to care for their teeth and gums. The percentage of survey respondents who had no problems with their teeth or gums during their pregnancy was 80.6 percent.

# Table 11: Last Visit to Dentist or Dental Office

Within the past year	64.8%
Within the past 2 years	17.1%
Within the past 5 years	10.4%
5 years or more	6.1%
Never	0.3%

Source: South Dakota Department of Health

# Table 12: How Long Since Last Teeth Cleaning

Within the past year	60.5%
Within the past 2 years	18.3%
Within the past 5 years	10.2%
5 years or more	7.6%
Never	1.7%
Not answered or unknown	1.8%

Source: South Dakota Department of Health

## Table 13: Problems With Teeth or Gums During Pregnancy

No	80.6%
Yes	19.2%
Not answered	0.2%
Able to See a Dentist fo	or Treatment
Yes	62.2%
No	34.3%
Not answered	3.5%

Source: South Dakota Department of Health

#### Expectant mothers:

- ✓ See your dentist early
- ✓ Tell your dentist that you are pregnant
- ✓ Brush with a soft toothbrush at least twice a day
- ✓ Floss daily

- ▶ The Oral Health Program coordinates programming to increase awareness of the importance of oral health and preventive care, improve access to dental care, and promote the use of innovative and cost effective approaches to oral health promotion and disease prevention
- ► For further information contact Julie Ellingson, Oral Health Coordinator, (605) 773-3737.

#### **Mother's Health Conditions**

Overall, 12.9 percent, or 116 of the survey respondents reported having health conditions before and 32.3 percent or 289 during their pregnancy. See the table below for a breakout of percentages of health conditions the survey respondents had before and during their pregnancy.

Table 14: Health Conditions Before or During Pregnancy

	Before	During
High blood pressure.	2.1%	11.3%
<i>Other</i>	0.3%	2.9%
Diabetes	1.1%	7.1%
Inflamed Gums	0.9%	6.4%
Epilepsy	0.4%	0.6%
Asthma	4.9%	1.8%
STD's/HIV/AIDS	3.1%	2.3%

Source: South Dakota Department of Health

#### **Diabetes**

Diabetes is a disorder in which the body does not produce enough insulin or does not utilize insulin properly. Insulin is a hormone that allows sugar to enter cells, where it can be turned into energy.

Women with poorly controlled diabetes are several times more likely to have a baby with a serious birth defect, such as a heart defect or neural tube defect. They also are at increased risk of miscarriage and stillbirth and are at risk for delivering a baby that is extremely large, approaching 10 pounds or more.

#### **Hypertension (High Blood Pressure)**

Blood pressure is the measurement of the pressure of blood pushing against the walls of the blood vessels as it is pumped through the body. The systolic pressure, or upper number, measures the pressure during a heartbeat. The diastolic pressure, or lower number, measures the pressure between heartbeats.

High blood pressure during pregnancy can cause a decrease in the blood and oxygen supply available to mother and baby. In the mother it can lead to kidney problems, breathing problems,

seizures, strokes and even death. Babies may have problems with growing, getting enough oxygen and other complications.

#### **Inflamed Gums**

Growing evidence suggests a link between gum disease and premature, underweight births. Pregnant women who have gum disease may be more likely to have a baby that is born early and too small.

Of the 7.3 percent who reported inflamed gums, 18.5 percent stated they were unable to see a dentist for treatment. An additional 20 percent did not state whether they were able to see a dentist for treatment.

#### **Epilepsy (Seizure Disorder)**

Epilepsy is a disorder of brain function characterized by recurrent seizures. Pregnancy can cause a decrease or increase in seizures and for some women there is no change in seizure activity.

Women with epilepsy taking anticonvulsant medication have a 2-3 times greater risk of having babies with birth defects. Women who have epilepsy and are no longer taking medication have a 1-2 times greater risk of having an infant with birth defects.

#### **Asthma**

If you do not keep your asthma under control during your pregnancy, you may suffer from high blood pressure, severe bleeding, eclampsia (also called toxemia) and have a complicated labor. Your baby may be born prematurely, with a low birth weight, and could be at risk for an early death. For these reasons, it is very important to keep your asthma in control during your pregnancy.

#### STD's and HIV/AIDS

Finding out you have an STD, which includes syphilis, hepatitis B, gonorrhea, chlamydia, and possibly human immunodeficiency virus (HIV-the virus that causes AIDS), can be very frightening. But not knowing, and not getting treatment, can be harmful or even fatal to you or your baby. Protect yourself from STDs by practicing safe sex.

#### **Prenatal Care**

Overall, 62.1 percent of the women obtained prenatal care without encountering any problems. In regards to income, 24 percent of women in the \$20,000 to \$29,999 income bracket encountered problems getting prenatal care with the most common reason being that they were waiting to qualify for Medicaid.

Of those women who indicated problems getting prenatal care 39.7 percent responded that their doctor didn't want to see them until they were 12 weeks into the pregnancy. The second most common reason provided by survey respondents was that they didn't know they were pregnant.

Other top reasons given by respondents pertaining to problems getting prenatal care included past experience, waiting to qualify for Medicaid, and not enough money to pay for care.

Table 15: Problems Encountered by Some Women Getting Prenatal Care

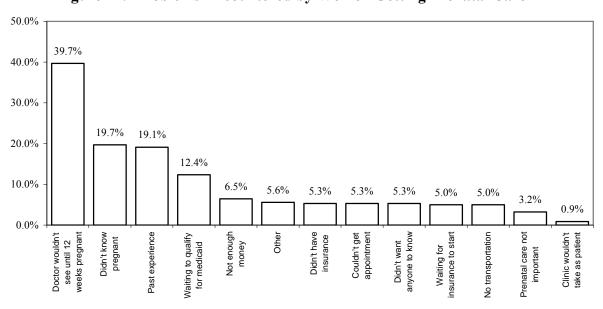
Problems encountered	37.9%
No problems encountered	62.1%

# Problems Encountered by Women Getting Prenatal Care

Doctor didn't want to see me until
12 weeks into pregnancy39.7%
Didn't know I was pregnant19.7%
Had been pregnant before and so
knew what it was all about19.1%
Waiting to qualify for Medicaid12.4%
Not enough money to pay6.5%
<i>Other</i>
Didn't have insurance5.3%
Couldn't get an appointment 5.3%
Didn't want anyone to know I was
pregnant 5.3%
Waiting for insurance to start5.0%
No way to get to clinic or doctor's
office5.0%
Don't think prenatal care is important3.2%
Couldn't get doctor or clinic to take
as a patient0.9%

Source: South Dakota Department of Health

Figure 12: Problems Encountered by Women Getting Prenatal Care



Overall, 89.4 percent of the survey participants started prenatal care in their first trimester. Of those reporting barriers to obtaining prenatal care in their pregnancy, 77.6 percent began prenatal care in the first trimester of their pregnancy and 19.1 percent began care in the second trimester.

However, 95.9 percent of the women who reported no barriers began prenatal care in the first trimester of their pregnancy and 2.7 percent began care in the second trimester.

The 0.6 percent who reported no prenatal care cited barriers that included not knowing they were pregnant, and not wanting anyone to know they were pregnant.

Regardless of barriers, an average of 89.4 percent of the participants started prenatal care in the first trimester, for the last three surveys conducted.

## Healthy People 2010

Objective 16-16a is to increase maternal prenatal care beginning in first trimester of pregnancy to 90%.

Source: U.S. Department of Health and Human Services

Figure 13: Trimester Prenatal Care Began and Barriers to Prenatal Care

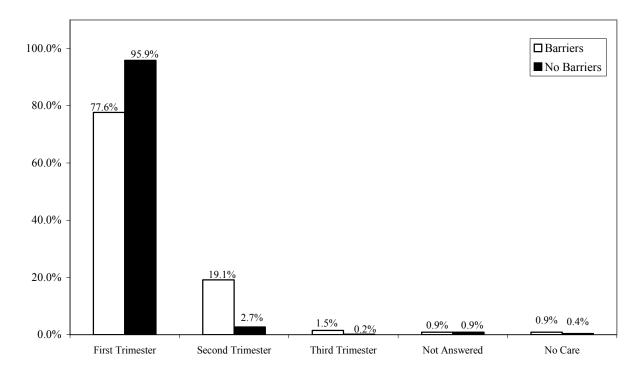


Table 16: Did Anything Keep You From Having as Many Prenatal Visits as You Wanted?

<i>No</i>	95.9%
Yes	3.9%
Not answered	0.2%

#### Reasons Women Did Not Have as Many Prenatal Visits as Desired

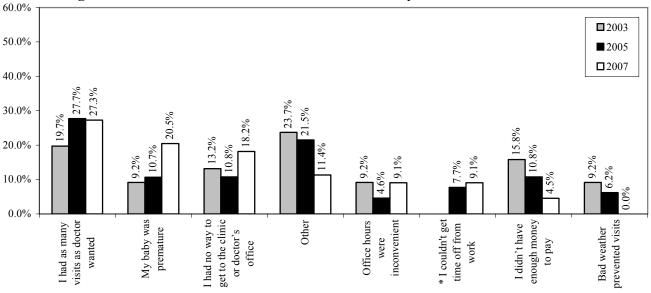
I had as many visits as doctor wanted	27.3%
My baby was premature	
I had no way to get to the clinic or doctor's office	
Other	11.4%
Office hours were inconvenient	9.1%
I couldn't get time off from work	
I didn't have enough money to pay	
Bad weather prevented visits	0.0% /
-	

Source: South Dakota Department of Health

The majority of women or 95.9 percent reported that nothing kept them from having as many prenatal visits as they wanted.

The most common reason in the "Other" category was that they chose not to go for visits.

Figure 14: Reasons Women Did Not Have as Many Prenatal Visits as Desired



NOTE: \* New answer choice in 2005. Source: South Dakota Department of Health

- ▶ Through DOH programs such as WIC, Family Planning and Baby Care early and adequate prenatal care is promoted. The programs refer pregnant women seen at their sites to medical providers of prenatal care as well as referring them to financial resources such as Medicaid.
- ▶ The Department of Health conducted a media campaign to increase women's awareness of the signs they maybe pregnant and the importance of prenatal care.

# Method of Payment for Prenatal/Delivery Care

For the total population, personal income (cash, check or credit card), insurance, and Medicaid were the most common forms of payment. Of the 25.6 percent on Medicaid, 17.8 percent were on the pregnancy only program with the other 7.8 percent on full Medicaid coverage. In comparison, 35.3 percent of single live births in 2006 reported Medicaid as the payment type.

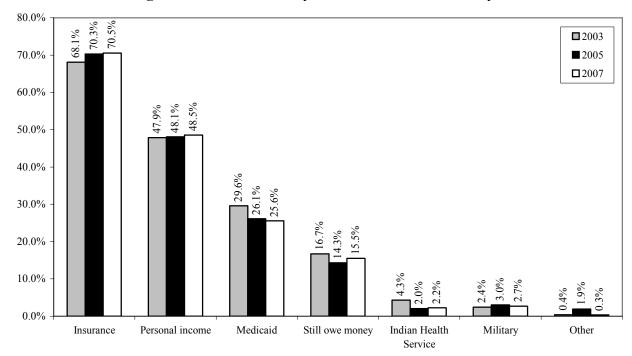
Table 17: Method of Payment for Prenatal/Delivery Care	
Insurance	70.5%
Personal income	48.5%
Medicaid	25.6%
Still owe money	15.5%
Military	2.7%
Indian Health Service	
Other	

Overall, 15.5 percent still owed money for their prenatal/delivery care at the time of the survey. Of these, 65.5 percent indicated both insurance and personal income as method of payment with an additional 23.7 percent indicating one or the other method as payment.

Of those that still owed money for prenatal/delivery care, 39.6 percent said the baby was between two and four months old, 23 percent said the baby was between four and six months old, 35.3 percent said the baby was between six and eight months old and the remaining 2.2 percent did not state how old the baby was at the time of the survey.

Source: South Dakota Department of Health

Figure 15: Method of Payment for Prenatal/Delivery Care



# Table 18: Weight Gain During Pregnancy

Lost Weight
0-15 pounds gained 11.3%
16-25 pounds gained24.4%
26-40 pounds gained
41-60 pounds gained 15.3%
61 + pounds gained3.0%
<i>Not answered1.8%</i>
*Gained more than recommended weight
1,07 05,7 0. 00

\* Based on singleton pregnancy.

Source: South Dakota Department of Health

#### **Weight Gain During Pregnancy**

Overall, 78.9 percent of the women surveyed said that a doctor, nurse or other health care professional talked to them about what they should eat during pregnancy.

Healthy eating is important during pregnancy because it increases the likelihood that the baby will be healthy. Women should eat a balanced diet and have an intake of adequate calcium before and during the pregnancy.

Prior to pregnancy, 52.8 percent of the respondents had normal weight defined by body mass index. This was calculated from data women supplied about their height and weight. Please see the glossary (page 59) for more information about body mass index, weight and ideal weight gain during pregnancy.

- √ According to survey responses, the percentage of low birth weight babies among those gaining less than their ideal pregnancy weight was 13.5 percent, compared to 5.6 percent among those who gained the minimum recommended weight.
- √ While it is important for women to gain at least the minimum weight recommendations during pregnancy, excessive weight gain should be discouraged, as women tend to retain weight gain thus contributing to the obesity epidemic.

## Healthy People 2010

Objective 16-12 (Developmental) Increase the proportion of mothers who achieve a recommended weight gain during their pregnancies.

Source: U.S. Department of Health and Human Services

- ▶ The South Dakota Department of Health encourages all women to gain an appropriate amount of weight during pregnancy based upon their pre-pregnancy weight and the number of fetuses the woman is carrying. All women who participate in WIC, Baby Care and Bright Start Home Visits have their weight assessed and weight gain recommendations are made. Women are provided nutrition counseling to help them achieve proper weight gain. Referrals are made when indicated.
- ► For further information contact Kristin Biskeborn, State Nutritionist, (605) 734-4551.

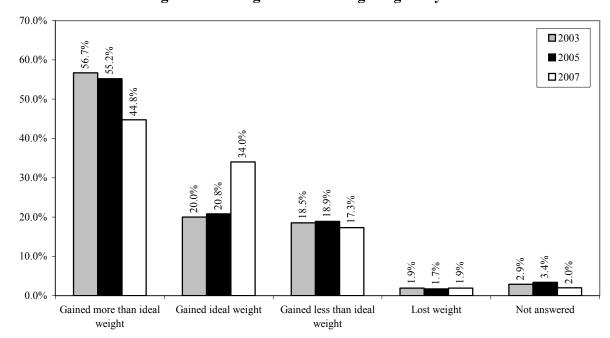


Figure 16: Weight Gain During Pregnancy

# **Physical Activity**

Participants were asked how often they participated in a physical activity or exercise for a total of 30 minutes or more per day the three months before they became pregnant and during the last three months of their pregnancy.

Overall, the majority stated that they participated 1 to 2 days a week, both before and during the last three months of their pregnancy, 32.1 percent, and 29.7 percent, respectfully.

The South Dakota Department of Health recommends daily physical activity to enhance health. Almost all women can and should be physically active during pregnancy. Talk to your health care provider first, particularly if you have high blood pressure, diabetes, anemia, bleeding, or other disorders, or if you are obese or underweight.

Whether or not you were active before you were pregnant, ask your health care provider about a level of exercise that is safe for you. Aim to do at least 30 minutes of a moderate activity (one that makes you breathe harder but does not overwork or overheat you) on most days of the week.

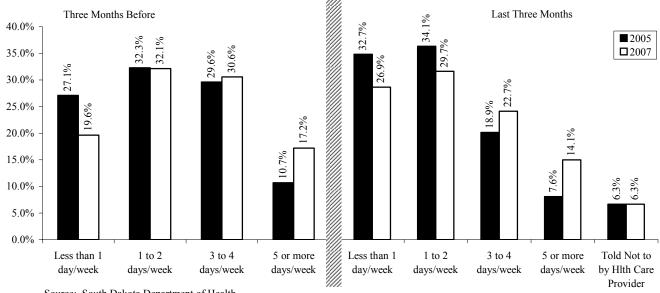
# Regular, moderate physical activity during pregnancy may:

- Help you and your baby to gain the proper amounts of weight
- Reduce the discomforts of pregnancy such as backaches, leg cramps, constipation, bloating, and swelling
- Improve your mood, energy level, and feelings about the way you look
- Strengthen your muscles and improve your blood flow
- Improve your sleep
- Help you have an easier labor
- Help you to recover from delivery and return to a healthy weight faster.

Table 19: Did You Participate in Any Physical Activity Before or During Pregnancy?

	Three Months Before Your Pregnancy	Last Three Months of Your Pregnancy
Less than 1 day per week	19.6%	26.9%
1 to 2 days per week	32.1%	29.7%
3 to 4 days per week		
5 or more days per week		
Not answered		
Told by a doctor, nurse, or other health	h care worker not to exercise	6.3%

Figure 17: Physical Activity Before or During Pregnancy



- ▼ Follow these safety precautions while being active during your pregnancy:
  - Choose moderate activities that are unlikely to injure you, such as walking, aqua aerobics, swimming, yoga, or using a stationary bike.
  - Stop exercising when you start to feel tired, and never exercise until you are exhausted or overheated.
  - Drink plenty of water.
  - Wear comfortable clothing that fits well and supports and protects your breasts
  - Stop exercising if you feel dizzy, short of breath, pain in your back, swelling, numbness, sick to your stomach, or if your heart is beating too fast or at an uneven rate.

- ▼ For your health and safety, and for the health of your baby, there are certain physical activities that you should not do while you are pregnant. Some are listed below. Talk to your health care provider about other physical activities that you should avoid during your pregnancy.
  - Avoid being active outside during hot weather.
  - Avoid steam rooms, hot tubs, and saunas.
  - Avoid physical activities, such as certain yoga poses, that call for you to lie flat on your back after 20 weeks of pregnancy.
  - Avoid contact sports such as football and boxing, and other activities that might injure you such as horseback riding.
  - Avoid activities that make you jump or change directions quickly such as tennis or basketball. During pregnancy, your joints loosen and you are more likely to hurt yourself when doing these activities.

#### **Sources of Pregnancy Information**

When asked to select the three most useful sources for education about pregnancy, the most common responses were the woman's doctor, information from books and magazines and previous experience with pregnancy.

Other common responses included family and friends, packets of information handed out at the doctor's office or clinic, clinic nurse, and prenatal classes.

Table 20: Sources of Pregnancy Information		
Doctor69.0%	WIC staff12.9%	
Books, magazines and other47.8%	Midwife6.6%	
Previous experience with pregnancy 40.7%	Public health nurse or	
Family and friends32.6%	community health nurse	
Packet of information at	or baby care nurse3.0%	
doctor's office or clinic23.0%	New Beginnings	
Clinic nurse18.4%	prenatal newsletter1.9%	
Prenatal classes 16.5%	Healthy Start staff1.2%	
\ Internet16.2%	Other0.9%	

Source: South Dakota Department of Health

#### **Department of Health Activities**

▶ Through Department of Health programs such as WIC, Baby Care and Bright Start Home Visitations information is provided to women receiving these services. In addition, the Department of Health purchases and develops client education materials with pregnancy information. The Department of Health also makes the New Beginnings Prenatal Newsletter available to pregnant women accessing Department of Health programs.

#### **Information Received By Respondents**

The most common topics discussed with women were the importance of folic acid (82.9 percent), preterm labor signs (84.2 percent), and aspirin and other over-thecounter medicines (78.7 percent). The only three topics that were not discussed with at

least 50 percent of the survey respondents were how to care for mother's teeth and gums, HIV/AIDS, and physical abuse by husband/partner. Physical abuse by husband or partner was new this year and discussed with 44.1 percent of the survey respondents.

Table 21:	Summary of	f Information	n Received Before	e. During or	After Pregnancy
I WULL DI.	Swiitina, oj	Titlo: intatto:	i ilocoirea Dejeri	, <i>Dui iii</i> , oi	Tipor i regitalite

Preterm labor signs 84.2%	Not changing cat litter61.6%
The importance of folic acid 82.9%	Avoiding paint fumes, other
What I should eat 78.9%	chemicals and radiation58.0%
Aspirin and other	Thoroughly cooking meats55.5%
over-the-counter medicine 78.7%	<i>Chewing tobacco53.6%</i>
<i>Smoking</i> 77.2%	Marijuana, crack cocaine, meth
Physical activity76.6%	or other street drugs 51.2%
Drinking alcohol75.3%	How to care for my
Possible family history of	teeth and gums47.3%
birth defects75.2%	<i>HIV/AIDS</i> 46.5%
Wearing safety belts 65.4%	Physical abuse by husband/partner 44.1%

#### **Seat Belts**

There is no evidence that seat belts hurt the unborn baby during a collision. Mothers who wear seat belts during pregnancy suffer fewer injuries and deaths than those who do not wear them.

Of the survey respondents, 65.4 percent reported that a doctor, nurse or other health professional had talked to them about wearing a safety belt during their pregnancy.

Wearing Seat Belts Correctly

- Wear both the lap and shoulder belt, adjusting both as snugly as comfortably possible.
- Place the lap belt under the abdomen as low on the hip as possible and across the thighs. Never place the lap portion of the belt above the abdomen.
- Position the shoulder belt between the breasts. The belt should cross the shoulders without chafing the neck.

## Healthy People 2010

Objective 15-20 Increase use of child restraints to 100%.

Source: U.S. Department of Health and Human Services

## Table 22: Baby Came Home From Hospital in a Car Safety Seat

Yes	99.7%
No	0.1%
Not answered	0.2%

#### Currently Using a Car Safety Seat

Always	96.8%
Sometimes	
<i>Never</i>	
Not answered	0.2%

## Reasons for Sometimes Not Using a Car Safety Seat

Baby requires feeding or	
diaper change	70.4%
Baby is crying	44.4%
Takes too much time	7.4%
Other	25.9%

Source: South Dakota Department of Health

## Car Safety

Almost all or 99.7 percent of the mothers surveyed reported that their baby had been taken home from the hospital in a car safety seat.

Again, almost all or 96.8 percent of babies were put into a car safety seat when traveling. In the back seat facing backward is the safest place for the baby to ride and 94.9 percent of babies rode in this position.

The percent of respondents who stated they sometimes do not use a car safety seat because it takes too much time is 7.4 percent, down from 11.9 percent in 2005.

Of all the survey participants, 49 percent purchased their baby's current car safety seat new. Written instructions were the source of information for the proper use of the car safety seat 55.4 percent of the time.

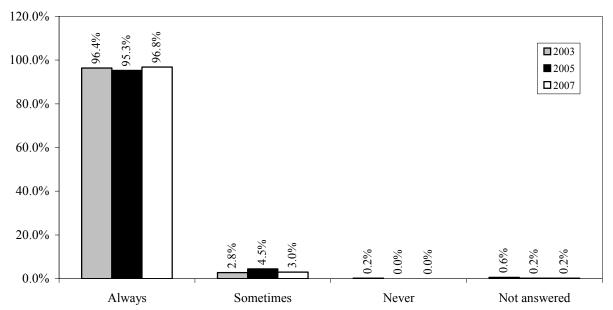
## Table 23: Source of Current Car Safety Seat

Purchased or received new	49.0%
Previous child's	35.8%
Purchased or received used	14.5%
Did not use	0.3%
Not answered	0.3%

Overall, 91 percent of the respondents stated that a doctor, nurse or other health care professional discussed the use of a car safety seat with them.

Source: South Dakota Department of Health

Figure 18: Use of Car Safety Seat



Source: South Dakota Department of Health

- ▶ The South Dakota Department of Health collaborates with the Office of Highway Safety in promoting child passenger safety and the Governor's Child Safety Seat program in the state through the local Community Health Offices.
  - In South Dakota, the Governor's Child Safety Seat Program through the Office of Highway Safety has child safety seats available for families that cannot afford one. Website: http://www.state.sd.us/project8/.
  - It is a primary law in South Dakota that every child or youth 17 years and under must be properly restrained. Website: <a href="http://www.state.sd.us/dps/hs/newlaw.htm">http://www.state.sd.us/dps/hs/newlaw.htm</a>.
- ► For further information contact Emergency Medical Services for Children, USD School of Medicine, (605) 328-6668.

60.0% **2**003 49.0% ■2005 50.0% □2007 35.8% 40.0% 30.0% 15.9% 20.0% 10.0% 0.3%0.3% 0.0% From previous child \*Other Not answered Purchased or Received Purchased or Received

Figure 19: Source of Car Safety Seat

new

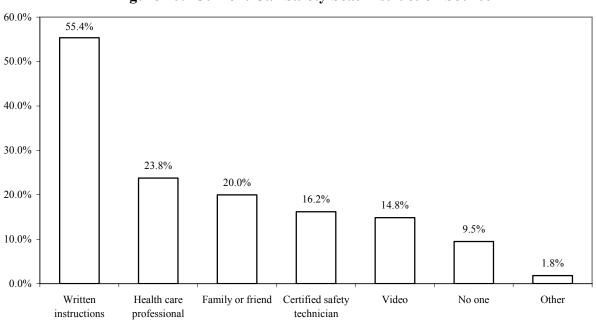


Figure 20: Current Car Safety Seat Instruction Source

used

# Table 24: Participation in Assistance Programs

<i>WIC</i>	26.6%
Medicaid	25.2%
Pregnancy only program	17.1%
Full coverage	8.1%
Food Stamps	10.3%
Indian Health Service	3.9%
Healthy Start/Bright Start	
Home visits	2.8%
Baby Care/	
Case Management	1.7%
Temporary Assistance for	
Needy Families	1.7%
Others	0.3%

# Participation in State and Federal Programs

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) was the program utilized by the highest percentage of respondents with 26.6 percent of mothers and babies enrolled. Of the respondents who said they were enrolled in WIC, 80.7 percent stated they were also in another program, including Medicaid and Indian Health Service.

At 25.2 percent, Medicaid was the second most common program utilized by survey respondents. Respondents on Medicaid were asked if they were covered for full coverage (8.1 percent) or pregnancy only (17.1 percent). Overall, 63.7 percent of the survey participates were not in any of the listed programs.

WIC is a supplemental nutrition program that serves pregnant, breastfeeding and post-partum mothers, infants and children up to age 5. This is a USDA funded program. To qualify, the household income must be at or less than 185 percent of the poverty level and there must be a nutritional/medical risk. Participants receive nutrition education, prescribed foods and referrals.

► For further information contact Rhonda Buntrock, WIC Director, (605) 773-3737.

The Baby Care program is a cooperative effort between the Department of Health's Perinatal Program and the Department of Social Services' Medicaid program to provide case management services for high risk pregnant women. The goal of the program is to reduce maternal, neonatal, and infant mortality and morbidity in South Dakota. The purpose is to help pregnant women obtain needed services such as physician prenatal care and to provide nursing services to promote a healthy pregnancy and positive birth outcome.

► For further information contact Jenny Williams, Perinatal Nurse Consultant, (605) 773-3737.

The Bright Start Home Visitation program, available in Rapid City or Sioux Falls, targets expectant mothers and is designed to help them improve their health in order to give birth to healthy babies. Parents and prospective parents receive home visits to learn how to care for their personal health needs, care for their child or children, stimulate their child's development and provide a nurturing home environment.

► For further information contact Darlene Bergeleen, Administrator, Office of Community Health Services, (605) 539-1866.

40.0% **2**003 31.4% 35.0% **2005** 28.4% □2007 26.7% 26.6% 30.0% 25.2% 25.0% 20.0% 15.0% 10.3% 10.0% 5.0% 0.0% WIC Medicaid Food stamps ndian Health Baby care/case Healthy Start & Others Veedy Families Assistance for management Bright Start Service Temporary Source: South Dakota Department of Health HIV / AIDS

Figure 21: Participation in State and Federal Programs

If a pregnant woman has HIV, her unborn baby can be infected. There are special medical treatments to reduce the chance that the baby will contract HIV.

Overall, 46.5 percent of the total survey respondents said that a doctor, nurse or health care professional provided information on HIV and AIDS.

# Protecting an Unborn Baby From HIV/AIDS

- Zidovudine therapy for infected pregnant women has been proven reduce the proportion of infected babies.
- For treatment to be given with optimum success, the woman must be identified as HIV positive either before or as early in the pregnancy as possible.
- Delivery by Cesarean section may also reduce the risk of the baby contracting HIV.

#### **Department of Health Activities**

- ▶ The South Dakota Department of Health HIV Program provides client education materials and technical assistance to prenatal care providers. The program collaborates with select providers to reduce barriers to prenatal screening for HIV.
- ► For further information contact April Ivey, HIV Prevention Coordinator, (605) 773-3737.

# **Teratogens**

## Paint Fumes, Chemicals and Radiation:

Avoiding paint fumes, chemicals, and radiation while pregnant was discussed with 58 percent of the survey respondents.

# **Over-the-Counter Medications:**

The use of aspirin and other over-thecounter medications while pregnant was discussed with 78.7 percent of the survey respondents.

Pregnant women should consult their doctors before taking prescription medications, cold pills, cough medicine, aspirin, laxatives, sleeping pills, allergy medications, diet pills or any other medicines.

Of the respondents, 23.7 percent used some form of a prescription drug during the three months before they became pregnant with 16.5 percent of them having a baby born early, 7.1 percent having a baby with low birth weight, and 5.7 percent had both a premature baby with a low birth weight.

## **Illicit Drugs:**

Babies can become addicted to drugs that the mother is taking. After birth, the baby may be shaky and show other signs of withdrawal. These babies may be delivered prematurely, have low birth weight and be very weak.

The effects of marijuana, crack, cocaine, meth, or other street drugs on the baby were discussed with 51.2 percent of the survey respondents and 2.3 percent of them admitted using marijuana or hashish during the three months before they became pregnant.

## **Teratogens**

A teratogen is any environmental agent that can potentially harm the developing fetus.

# Teratogens Include:

- Cigarette smoke
- Alcohol
- Prescribed or over-thecounter medication
- Vaccination, disease or infection before or during pregnancy
- Drugs
- Inhalants, pesticides, paints, varnishes or other chemicals
- Excessive heat or radiation or other physical agents
- Pollutants

## Illicit Drugs Include:

- Crack/Cocaine
- Speed or Uppers
- Downers
- Heroin
- PCP/Angel Dust
- LSD
- Marijuana
- *Methamphetamine (Meth)*

# Preventing Toxoplasmosis and Other Infections During Pregnancy

- Don't empty the cat's litter box
- Don't eat raw meat or undercooked meat
- Wash hands with soap after handling raw meat
- Wash all fruits and vegetables before eating them
- Don't feed the cat raw or undercooked meat
- Keep cats indoors; this prevents them from hunting birds or rodents that may be infected
- Wear gloves when gardening since outdoor soil may contain the parasite from cats
- Avoid children's sandboxes since a cat may have used them as litter boxes

## Signs of Preterm Labor

- Contractions or cramps
- Bleeding
- Swelling or puffiness of the face or hands
- Pain which may be due to a possible urinary tract, bladder, or kidney infection
- Sharp or prolonged pain in the stomach
- Acute or continuous vomiting
- Low, dull backache
- Intense pelvic pressure

# **Preventing Infections During Pregnancy**

Toxoplasmosis is a disease caused by a parasite called *Toxoplasma gondii*. It is usually contracted by exposure to cat feces or eating raw, uncooked or undercooked meat. A woman contracting toxoplasmosis has about a 40 percent chance of passing it on to her unborn baby. Unborn children infected in early pregnancy are most likely to suffer severe health effects, which may include blindness, deafness, seizures, and mental retardation.

*E-coli* is the organism that leads to serious infection linked to undercooked meat, unpasteurized apple juice and unwashed fruits and vegetables. It is present in feces.

Overall, 55.5 percent of the survey respondents had been told to ensure that meats were thoroughly cooked compared to 51.7 percent in 2005. The percent of respondents being warned about changing cat litter rose slightly from 61.1 percent to 61.6 percent in 2007.

#### Preterm Labor

Preterm labor is a serious complication of pregnancy. Understanding and recognizing preterm labor can help prevent premature births.

A doctor or nurse had discussed the signs of preterm labor with 84.2 percent of the survey respondents.

# Table 25: Life Stressors *Move to a new address* ...... 25.3% Illness of a close family member...... 18.6% More arguments than usual...... 15.7% *Someone close died* ...... 15.4% Someone close had a problem with drinking/drugs...... 8.9% Expectant mother *lost her job* ...... 6.1% Husband/partner lost his job...... 6.1% Separation or divorce...... 5.2% Husband or partner didn't want pregnancy........... 3.8% *Mother or husband/partner* went to jail ...... 3.1% Involvement in a *physical fight.....* 2.2% Homelessness...... 1.1%

#### **Life Stressors**

Being under stress while pregnant can result in premature and low birth weight babies. Pregnancy can be a difficult time for some women. Survey respondents were asked to identify significant events (illness, divorce, job loss, arrest, death, etc.) which might have contributed to stress during the 12 month period before delivery.

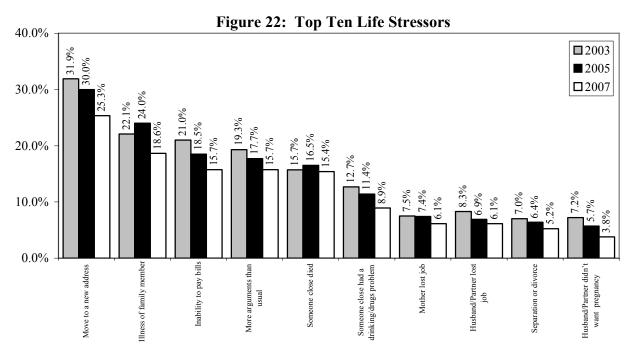
The top stressors of the survey respondents were moving to a new address, illness of a close family member, inability to pay bills, and arguing more than usual with a husband or partner. Other common stressors were the death of someone very close to the mother and someone close to the mother having a problem with drinking or drugs.

Source: South Dakota Department of Health

# **Department of Health Activities**

▶ Through the Department of Health Baby Care and Bright Start Home Visitation programs, staff help program participants to identify and access personal and community resources to deal with significant events occurring during the pregnancy.

► For further information contact Jenny Williams, Perinatal Nurse Consultant, (605) 773-3737.



## **Prematurity and Low Birth Weight**

Overall, 89.2 percent of the women said that their babies were not born more than three weeks before the due date and 93.8 percent of the babies did not have a low birth weight.

Women who smoked during pregnancy had a slightly higher rate of premature or low birth weight babies.

While 10.4 percent of the total survey respondents had premature babies, this figure increased to 13.2 percent among women who smoked while pregnant.

Just under six percent of the total survey respondents had babies with a low birth weight. This figure was 6.5 percent among women with one or more life stressors and 7.7 percent among women who smoked while pregnant.

Of the survey participants who had premature or underweight babies, 88.9 percent started prenatal care in the first trimester.

Survey respondents reporting babies with low birth weight~less than 5 pounds, 9 ounces.......5.8%

Survey respondents reporting babies born more than three weeks before due date ......10.4%

Survey respondents reporting babies both underweight and born more than three weeks before due date......4.1%

Source: South Dakota Department of Health

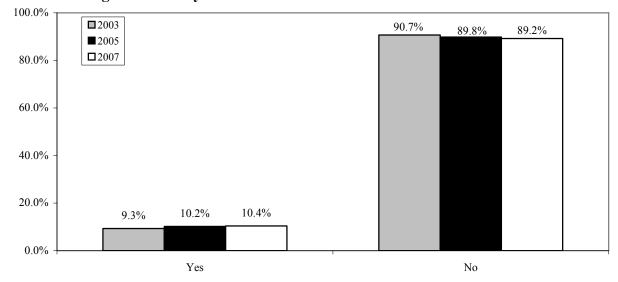
# Healthy People 2010

Objective 16-10a is a reduction to 5% of low birth weight babies.

Objective 16-11a is to reduce total preterm births to 7.6%.

Source: U.S. Department of Health and Human Services

Figure 23: Baby Was Born More Than Three Weeks Before Due



# Table 26: Number of Routine Well Baby Check-Ups 0 0.4% 1 5.7% 2 23.2% 3 30.0% 4 24.9% 5 15.7% Not answered 0.1%

Source: South Dakota Department of Health

# Well Baby Check-Ups

Less than 1 percent of babies had not been to the doctor for a routine well baby check-up and 3.3 percent reported reasons for not taking their baby for a well baby check-up. The most common reason for not taking their baby for routine baby care was bad weather.

Table 27: Did Anything Keep You From Taking Your Baby for Routine Well Baby Care?

<i>Yes</i>	3.3%
No	96.4%
Not answered	

Source: South Dakota Department of Health

Figure 24: Reasons Baby Has Not Been to Doctor for a Routine Check-Up, 2003-2007

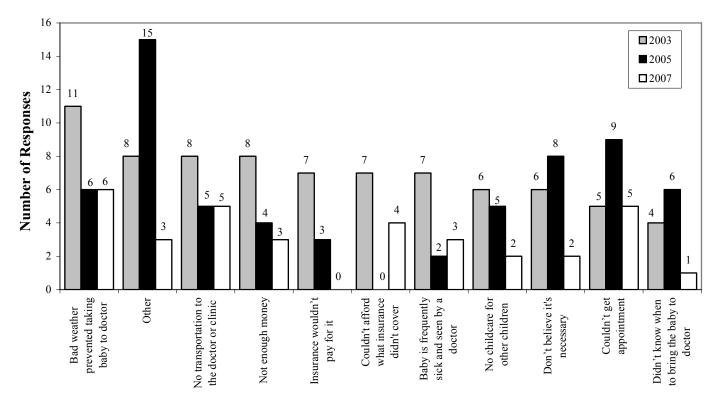


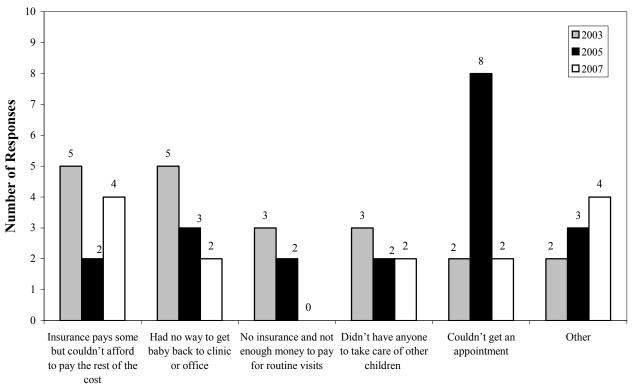
Table 28: Did Anything Keep You From Getting Medical Care for Your Baby When He or She Was Sick?

Yes	1.2%
<i>No</i>	77.5%
Baby was not sick	
Not answered	
Noi answerea	0.2%

Of those babies who did require care, 77.5 percent of mothers said that nothing stopped them from getting medical care when their baby was sick. Only 1.2 percent

of the respondents reported not getting medical care for their baby when he or she was sick and 21.1 percent of the babies had not been sick.

Figure 25: Reasons Baby Did Not Get Medical Care When Sick, 2003-2007



# Table 29: Newborn Hearing Screenings

Before leaving hospital	92.4%
Don't know	4.1%
Within one month of birth	1.8%
Never screened	1.2%
After one month of age	0.2%
Not answered	0.2%

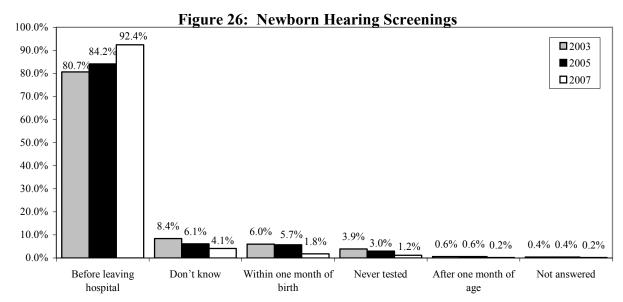
Source: South Dakota Department of Health

# **Newborn Hearing Screening**

Good hearing in children is essential to development. All too often, identification of a child's hearing impairment is delayed. If undetected and untreated, hearing loss can lead to delayed speech and language development, social and emotional problems and academic failure. Routine medical care should include the hearing evaluation that could identify those children with hearing loss. By detecting hearing loss during the first three months of life, families can be informed of their child's hearing status and appropriate intervention can be initiated immediately.

Of the mothers surveyed, 92.4 percent responded that their new baby's hearing was screened before being discharged from the hospital. Another 2 percent had their babies hearing screened at some point after discharge.

Of the survey participants, 85.2 percent said a doctor, nurse, or health care professional had discussed a hearing screening with them.



Source: South Dakota Department of Health

#### **Department of Health Activities**

- ▶ In December 1999, the Department of Health implemented the voluntary Newborn Hearing Screening Program in cooperation with South Dakota hospitals, clinics, and audiologists. Upon diagnosis of a hearing loss the infant and parents are referred to the Early Intervention Program for Infants and Toddlers with Disabilities within the Department of Education Office of Special Education. This program is called "Birth to Three Connections".
- ► For further information contact Terry Disburg, South Dakota Department of Health Newborn Hearing Screening Coordinator, (605) 773-3737.

# Table 30: Age When Baby Came Home From The Hospital

Less than 12 hours old	0.9%
12-24 hours old	17.0%
25-48 hours old	50.6%
More than 48 hours old	31.3%
Still in the hospital	0.1%
Baby was adopted	0.0%
Baby was born at home	0.1%
Not answered	0.1%

Source: South Dakota Department of Health

#### Table 31: Were You Visited at Home?

No	88.8%
Yes	9.7%
Not answered	1.5%

# Age of Baby at Time of First Home Visit

Less than 1 week old	26.4%
Between 1 and 2 weeks old	
More than 2 weeks old	37.9%
Not answered	1.1%

Source: South Dakota Department of Health

# Discharge Age

A total of 68.5 percent of the babies came home from the hospital in the first 48 hours. Overall, 50.6 percent of the babies came home from the hospital when they were between 25 and 48 hours old, and an additional 17 percent came home when they were between 12 and 24 hours old. Another 31.3 percent went home when they were older than 48 hours.

The graph on the next page provides data for surveys conducted in 2003, 2005, and 2007.

#### **Home Visits**

After arriving home, 9.7 percent of the babies were visited by a health care professional. However, the majority of babies (88.8 percent of the total survey population) received no home visit. Of the survey respondents who received a home visit, over half of the babies were less than 2 weeks old.

# **Department of Health Activities**

- ▶ Through the Department of Health Baby Care and Bright Start Home Visitation programs, home visits are provided to program participants after their baby is born. Home visits are also provided upon referral by the new mother's medical provider.
- ► For further information contact Jenny Williams, Perinatal Nurse Consultant, (605) 773-3737.

Figure 27: Age When Baby Came Home From The Hospital

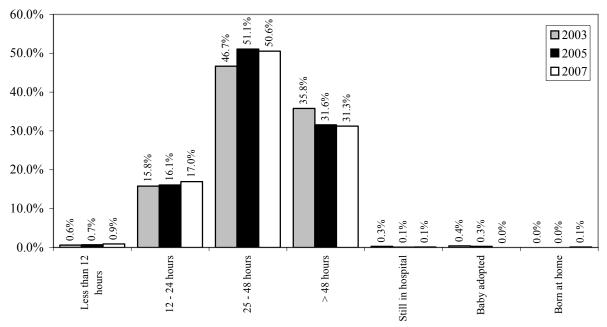


Figure 28: Age of Baby at Time of First Home Visit, 2003-2007 60.0% 80.9% □ 2003 50.0% **2005** 37.9%  $\square 2007$ 35.1% 34.5% 34.0% 40.0% 26.4% 30.0% 20.0% 10.0% 0.0% Less than 1 week old Between 1 and 2 weeks More than 2 weeks old Not answered

# Table 32: Most Useful Sources of Baby Care Information

Experience with
my other children 52.5%
Talking with baby's doctor 50.1%
Family and friends48.1%
Study of books, videos, etc 39.4%
Hospital staff26.5%
Packet of information from
doctor's office 15.2%
Classes (prenatal,
breastfeeding, parenting) 13.7%
My education/profession 12.3%
<i>Clinic nurse11.2%</i>
<i>Internet</i>
<i>WIC staff</i>
Public Health, Community
Health or Baby Care Nurse 2.2%
Healthy Start staff/Bright
Start home visits1.9%
<i>Other</i>
<i>Not answered</i> 0.3%

Source: South Dakota Department of Health

# Table 33: Baby Care Information Received

Baby's sleeping position	91.3%
Using a car safety seat	
Immunizations/baby shots	91.2%
Breastfeeding	89.0%
Shaking the baby	76.7%
What baby should eat	72.3%
Smoking around the baby	72.0%
Parenting classes	70.0%
Other safety tips	68.5%

Source: South Dakota Department of Health

#### **Department of Health Activities**

▶ Through the Department of Health programs such as WIC, Baby Care, Bright Start Home Visitations, and Immunizations information is provided to program participants regarding infant care. The programs develop and purchase client education materials distributed to staff and parents.

# **Sources of Baby Care Information**

Each survey respondent was asked to identify the three best sources of information for learning to care for the infant. Experience with other children, talking with the baby's doctor, family and friends, and a study of books, pamphlets and videos were the most common responses.

The subjects of baby's sleeping position, using a car safety seat, and immunizations were all discussed with over 90.0 percent of the respondents.

70.0% 60.0% 52.5% 50.1% 48.1% 50.0% 39.4% 40.0% 30.0% 26.5% 20.0% 15.2% 13.7% 12.3% 11.2% 10.5% 9.3% 10.0% 2.2%1.9% 0.8% 0.3% 0.0% Books, magazines, other My education/ profession Baby's doctor Family and friends Classes Other nurses Healthy Start / Bright Start home visits Previous experience Hospital staff WIC staff Other Not answered Information packet Clinic nurse

Figure 29: Most Useful Sources of Baby Care Information

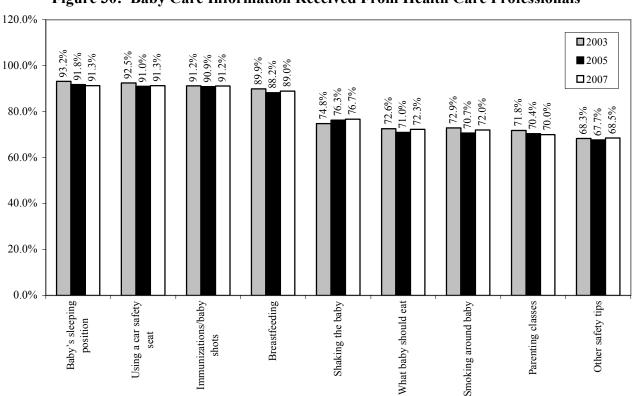


Figure 30: Baby Care Information Received From Health Care Professionals

#### **SIDS Related Behaviors**

Babies who sleep on their stomachs have a higher risk of SIDS. Of the total survey respondents, 91.3 percent reported that a doctor had talked to them about laying the baby down to sleep on his/her back or side, not on the stomach.

Regarding sleeping position, 73.3 percent of the respondents said that they chose the position their baby sleeps because of the recommendation of a health care professional. When the survey questions about sleeping position and why that position was chosen were analyzed, the data indicate that of the babies who sleep on their stomachs, 1.6 percent of mothers chose that sleeping position because it was recommended by a

Sudden infant death syndrome or SIDS is the sudden death of an infant under one year of age which remains unsolved after a thorough case investigation.

# Table 34: Sleeping Positions of The Baby

Back	84.3%
Side	
Stomach	6.9%
Not answered	0.4%

Source: South Dakota Department of Health

doctor or nurse. Of the babies that were placed on their backs, 84.5 percent of the mothers chose the position as the result of a recommendation by a doctor or nurse.

Other common reasons women chose the position their baby slept in included:

- Reading about it in a magazine, newspaper or baby care book (51.5 percent of the total survey population),
- Choosing same position in which other children had slept (31.1 percent of the total survey population).
- Heard about it on TV or radio (19.8 percent of the total survey population.

According to the 2006 Vital Statistics Report, the rate attributed to Sudden Infant Death Syndrome was 1 death per 1,000 live births. The total rate of infant deaths in 2006 was 6.9 deaths per 1,000 live births, a decrease from 2005's 7.2 deaths per 1,000 live births.

The number of babies sleeping on their stomachs has decreased from 9.8 percent in 2005 to 6.9 percent in 2007. Of the responses given for this position, 50 percent stated that this was the way the baby preferred or slept best and 35.5 percent stated it was the way their other children slept.

# Healthy People 2010

Objective 16-1h is to reduce deaths from Sudden Infant Death Syndrome (SIDS) to 0.25 deaths per 1,000 live births.

Source: U.S. Department of Health and Human Services

#### **Department of Health Activities**

- ▶ The Department of Health promotes the Back To Sleep campaign.
- ► For further information contact Jenny Williams, Perinatal Nurse Consultant, (605) 773-3737.

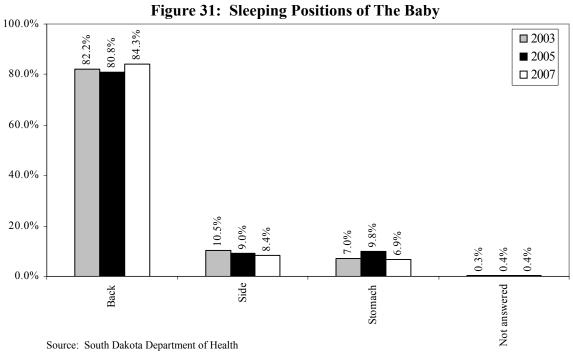


Figure 32: Why Back Was Chosen as Baby's Sleeping Position 40.0% **2**003 **2005** □2007 30.0% 23.3% 20.0% 10.7% 10.0% 5.9% 5.2% 4.0% Doctor/nurse Other children sleep this way Bright Start/Healtht Start home visits Read in magazine, Heard on TV or radio Family or friend Other I sleep in this position WIC staff suggested Afraid of vomiting/choking, etc. Other nurses suggested newspaper, etc. suggested suggested

50.0% **2**003 ■2005 40.0% **2**007 30.0% 21.5% 21.5% 17.9% 20.0% 14.6% 11.5% 10.6% 9.5% 8.8% %9.9 10.0% %0.9 3.1% 3.0% 0.8% %0:0 0.0% 0.0%Bright Start/Healtht Start home visits Doctor/nurse Other children sleep Read in magazine, Other I sleep in this Family or friend Heard on TV or Other nurses vomiting/choking, WIC staff suggested suggested newspaper, etc. position suggested suggested Afraid of radio this way

Figure 33: Why Side Was Chosen as Baby's Sleeping Position

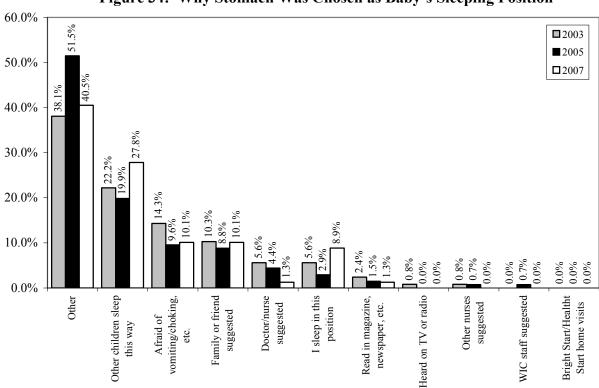


Figure 34: Why Stomach Was Chosen as Baby's Sleeping Position

# **Bedding Supplies and SIDS**

Having the baby sleep on a firm, tightfitting mattress in a crib that meets current safety standards can also reduce the risk of SIDS.

Of the 896 survey respondents, 69.4 percent responded that their baby sleeps in a standard size crib while 12.2 percent reported their baby sleeps in a bassinet or cradle.

Pillows, quilts, comforters, sheepskins, stuffed toys and other soft products should be removed from the crib. A sleeper or other sleep clothing should be considered as an alternative to blankets, with no other covering. A baby should not be placed on a waterbed, sofa, soft mattress, pillow, or other soft surface to sleep.

When asked what type of material is under the sleeping baby, 41.9 percent responded their baby sleeps on a combination of a firm mattress, mattress pad and sheet. Another 33.4 percent responded that their baby sleeps on a firm mattress with a sheet.

When asked how often the baby sleeps in the same bed with them or someone else only 41.2 percent said never.

Table 35: Where Baby Sleeps

Crib, standard size	69.4%
Bassinet, cradle	12.2%
Adult bed	9.3%
Portable crib	2.5%
<i>Playpen</i>	2.6%
Infant or car safety seat	
Other	
Not answered	0.3%

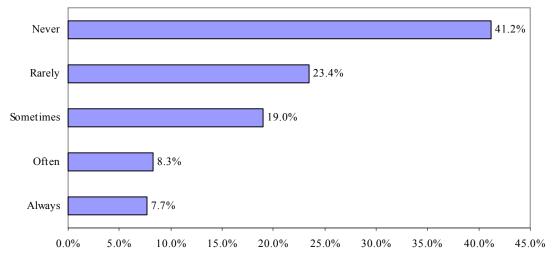
Source: South Dakota Department of Health

Table 36: Materials Under Sleeping Baby

Mattress, firm	85.2%
Sheet	70.0%
Mattress pad	41.7%
Blankets	16.6%
Foam pad	4.9%
Pillow	
Other	1.1%
Cushion	0.8%
Featherbed	0.3%
Water bed	0.2%
Sheepskin	0.1%
Sleeping bag	
Rug	
Beanbag	
O	,

Source: South Dakota Department of Health

Figure 35: Baby Sleeps With Mother or Someone Else



# **Breastfeeding**

Overall, 78 percent of the surveyed mothers were breastfeeding their baby at the time of hospital discharge.

The percentage of mothers who were breastfeeding at the time of discharge increased with the mother's age. Also, mothers that intended the pregnancy had a higher percentage of breastfeeding compared to those that did not intend the pregnancy.

Overall, 89.0 percent received information about breastfeeding their infant. Of those who received information 79.7 percent breastfed at discharge, compared to 6.9 percent who breastfed and reported not receiving information on breastfeeding. A breastfeeding class was attended by 17.6 percent of the mothers surveyed.

#### Breast milk:

- Contains more beneficial ingredients than infant formula
- Is more easily digested than infant formula, resulting in fewer cases of constipation, or colic, and stress on the infant's kidneys.
- Contains antibodies and other antiinfective properties which contribute to fewer cases of diarrhea, respiratory infections and other medical problems in breastfed infants.
- Costs less than purchasing formula.
- Reduces childhood obesity.

• Is nonallergenic. Babies are never truly allergic to breastmilk. In families with a history of allergies, breastmilk is the best way to avoid serious allergies.

Breastfeeding at time of discharge has increased from 74.7 percent in 2003 to 78 percent in 2007. The percent of mothers reporting breastfeeding at least once a day for the first month has decreased from 73 percent in 2005 to 68.5 percent in 2007. This decrease could be due to declining survey participants.

Table 37: Baby Breastfed at Hospital Discharge

Yes	78.0%
No	20.0%
Not answered	1.3%

# Baby Breastfed Once a Day for First Month

<i>Yes</i>	68.5%
<i>No</i>	25.2%
Not answered	6.3%

Source: South Dakota Department of Health

# Table 38: Breastfeeding Class Attendance

No	80.4%
Yes	17.6%
Not answered	2.0%

Source: South Dakota Department of Health

# Healthy People 2010

Objective 16-19a is to increase percent of mothers who breastfeed in early postpartum period to 75%.

Source: U.S. Department of Health and Human Services

100.0% 78.5% 78.0% □ 2003 **2005** 80.0% □ 2007 60.0% 40.0% 20.6% 20.0% 0.0% No Yes Not answered

Figure 36: Baby Breastfed at Hospital Discharge

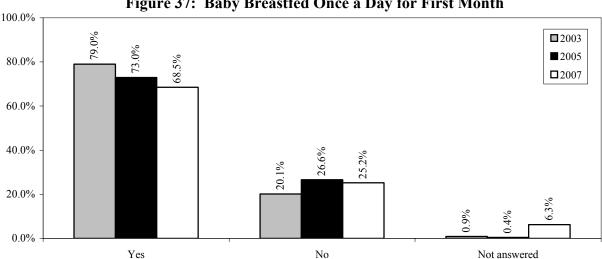


Figure 37: Baby Breastfed Once a Day for First Month

Source: South Dakota Department of Health

## **Department of Health Activities**

- ▶ The Department of Health promotes breastfeeding as the preferred method of infant feeding in all of its programs. Women participating in the WIC, Baby Care and Bright Start Home Visitation programs are counseled about the benefits of breastfeeding and are assisted to initiate and sustain breastfeeding. The Department of Health WIC program provides manual breastpumps and loans electric breastpumps to WIC participants to assist them with breastfeeding.
- ▶ The Department of Health is an active member of the South Dakota Breastfeeding Coalition and collaborates with the Coalition to promote World Breastfeeding Week each year. Breastfeeding initiation rates for the state are collected via the Newborn Screening Program from each hospital. Letters are sent to hospitals in the state with their individual rates and materials on how to increase and support breastfeeding.
- ► For further information contact Melissa Berg, WIC Nutrition Consultant, (605) 367-7496 or Kristin Biskeborn, State Nutritionist, (605) 734-4551.

# Table 39: Factors Preventing Mothers From Breastfeeding

Didn't think there
was enough milk20.7%
Didn't want to breastfeed14.3%
Planning to go to
work or school14.1%
Baby didn't breastfeed well 10.5%
Other10.2%
Difficult to pump/feed at work,
school, or in community 7.5%
Felt it was time to stop5.7%
Baby preferred the bottle 5.0%
Embarrassed in front of others 4.0%
Taking medication3.5%
9
Believe bottle-feeding is better 1.5%
No one to help with problems 1.3%
Baby was premature
or adopted1.1%
Partner/family didn't
want breastfeeding0.4%
$\setminus$ Breast surgery prevented me $0.1\%$

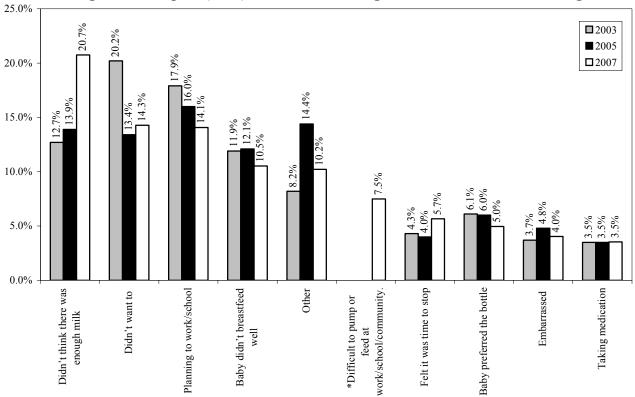
# **Barriers to Breastfeeding**

The most common reasons that women did not breastfeed were because they didn't think there was enough milk or they didn't want to breastfeed.

Among other reasons women gave for not breastfeeding were that it was too painful, they did not have enough time, other children made it difficult and problems with the milk supply. Another 7.5 percent said it was to difficult to find a place to pump or feed their baby at work, school or in the community.

Source: South Dakota Department of Health

Figure 38: Top 10 (2007) Factors Preventing Mothers From Breastfeeding



\* New response option in 2007

# **Shaken Baby Syndrome and Infant Safety**

Shaking a baby or child can cause blindness, brain damage or death. Young infants have weak neck muscles and cannot support their heavy heads. If they are shaken, their heads move back and forth. Since the blood vessels connecting the brain and skull are weak and underdeveloped, this may cause brain damage and bleeding in or on the surface of the brain. This injury is known as "Shaken Baby Syndrome."

Of the survey respondents, 76.7 percent said that a doctor or nurse talked to them about the effects of shaking a baby.

Overall, 68.5 percent of the mothers responding to the survey said that a doctor, nurse, or other health care professional had talked with them about other safety issues. This included safety tips about objects such as cribs, baby walkers and playpens.

# Preventing Shaken Baby Syndrome:

- ✓ Never shake a baby!
- ✓ Tossing the baby in the air or bouncing on the knee has the potential to hurt the baby and should be avoided.
- ✓ While holding a baby, always support the head.
- ✓ Learn how to calm yourself if the baby won't stop crying.

# Be Careful To Avoid Injury In:

- ✓ Crib
- ✓ Baby walkers
- ✓ Playpens

If a baby in your care won't stop crying, try the following:

- make sure the baby's basic needs are met (for example, he isn't hungry and doesn't need to be changed)
- check for signs of illness, like fever or swollen gums
- rock or walk with the baby
- sing or talk to him
- offer the baby a pacifier or a noisy toy
- take him for a ride in his stroller or in his car seat in the car
- swaddle the baby snugly in a blanket
- turn on the stereo, run the vacuum cleaner or the clothes dryer, or run water in the tub (babies like rhythmic noise)
- hold the baby close against your body and breathe calmly and slowly
- call a friend or relative for support or to take care of the baby while you take a break
- if nothing else works, put the baby on his <u>back</u> in his crib, close the door, and check on him in 10 minutes

## **Solid Foods**

The American Academy of Pediatrics currently recommends gradually introducing solid foods around 6 months of age. Solids do not help young infants to sleep through the night.

# 

Source: South Dakota Department of Health

Starting solids too soon can:

- Cause choking
- Be hard for baby to digest
- Cause food allergies
- Prevent baby from getting enough breast milk or formula.

# BABIES ARE READY FOR SOLIDS WHEN THEY CAN:

- Hold neck steady
- Sit without support
- Open mouth when food is offered
- Draw in lower lip when spoon is removed from mouth
- Keep food in mouth and swallow it
  - Reach for food showing they want some

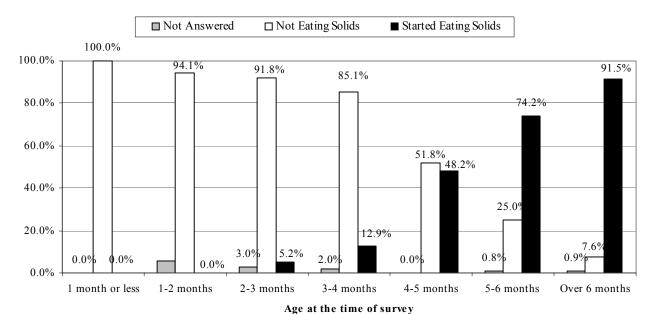


Figure 39: Age of Infants Eating Solids at The Time of The Survey

# Table 41: Number of People in Household

1	0.1%
2	3.2%
3	32.3%
4	30.2%
5	19.0%
6	9.4%
7	2.6%
8	1.7%
9 or more	1.0%

Source: South Dakota Department of Health

# Table 42: Number of People 17 Years or Younger in Household

0 or not answered	9.7%
1	30.6%
2	29.2%
3	18.2%
4	8.4%
5 or more	3.9%

Source: South Dakota Department of Health

## **Household Information**

The most common household sizes were 3 people at 32.3 percent and 4 people at 30.2 percent.

Of all the households, 30.6 percent had one person 17 years or younger and 29.2 percent had two people 17 years or younger.

## **Annual Household Income**

Overall, 44.5 percent of the survey respondents reported their annual household income before taxes and other deductions to be \$50,000 or more.

Table 43: Annual Household Income

Under \$10,000	6.9%
\$10,000 - \$19,999	6.0%
\$20,000-\$29,999	9.0%
\$30,000-\$39,999	
\$40,000-\$49,999	13.1%
\$50,000 or more	44.5%
Don't know	8.5%
Not answered	0.8%

# **Age of Parents**

The average age of the total survey participants was 29 years. The most common age for the baby's mother was 30. When age categories are used, the majority of mothers were between 25 and 29 years old

The average age of the father was 31 years. The most common age of the babies' fathers was 30 years and the most common age group was between 25 and 29 years.

Table 44: Age of Baby's Mother

	Survey	Vital Statistic
< 15	0.1%	0.4%
15-17	1.0%	2.6%
18-19	2.8%	6.6%
20-24	18.0%	28.2%
25-29	33.4%	31.4%
30-34	28.2%	20.2%
35-39	12.9%	8.7%
40-44	3.3%	1.8%
45 plus	0.0%	
•	0.2%	

Source: South Dakota Department of Health

Table 45: Age of Baby's Father

	Survey	Vital Statistics
15-17	0.8%	0.6%
18-19		2.7%
20-24	11.2%	
25-29	30.4%	27.2%
30-34		22.6%
35-39		
40-44	7.1%	5.0%
45 plus		2.0%
•	0.4%	

## **Education of Parents**

When asked for their highest level of education completed, 44.1 percent of mothers had completed college and 23.3 percent had some college or technical school. An additional 13.7 percent of the mothers had completed high school.

The majority or 35.9 percent of the fathers had completed college. The percentage (22.3 percent) of fathers was higher than the percentage (13.7 percent) of mothers who had completed high school or gotten a GED.

The tables below provide a comparison of the highest level of education completed between the survey participants and vital statistics data collected in 2005.

Table 46: Education of Mother

Survey	Vital Statistics
0.0%	0.1%
3.5%	0.8%
0.0%	
	<i>NA</i>
2.2%	
	0.1%
	0.0%

Source: South Dakota Department of Health

Table 47: Education of Father

	Survey	Vital Statistics
No Formal Education	0.0%	0.1%
Some Grade School	3.5%	0.8%
Completed Grade School	0.0%	
Some High School		
Completed High School or GED		
Some College or Tech School		
Completed College		
Some Graduate Work		
Completed Graduate Work	2.7%	9.0%
Not Answered		

In order to determine how survey results compared to the general population of the state, certain responses were compared to information from the 2005 South Dakota Vital Statistics Report and data from 2005 births. The data in this report were compiled and maintained by the South Dakota Department of Health, Office of Data, Statistics and Vital Records.

## Table 48: Low Birth Weight\*

2005 Vital Statistics	6.6%
2004 Vital Statistics	6.9%
2003 Vital Statistics	6.7%
2002 Vital Statistics	7.2%
2001 Vital Statistics	6.4%
2000 Vital Statistics	6.2%
1999 Vital Statistics	5.9%
2007 Survey results	5.8%

Source: South Dakota Department of Health

# Table 49: Mother Smoked During Pregnancy

2005 Vital Statistics	18.0%
2004 Vital Statistics	18.7%
2003 Vital Statistics	18.9%
2002 Vital Statistics	18.7%
2001 Vital Statistics	19.5%
2000 Vital Statistics	19.9%
1999 Vital Statistics	21.0%
2007 Survey results	8.4%

Source: South Dakota Department of Health

# Table 50: Average Age of Mother

2005 Vital Statistics	27
2004 Vital Statistics	27
2003 Vital Statistics	27
2002 Vital Statistics	27
2001 Vital Statistics	27
2000 Vital Statistics	27
1999 Vital Statistics	27
2007 Survey results	29

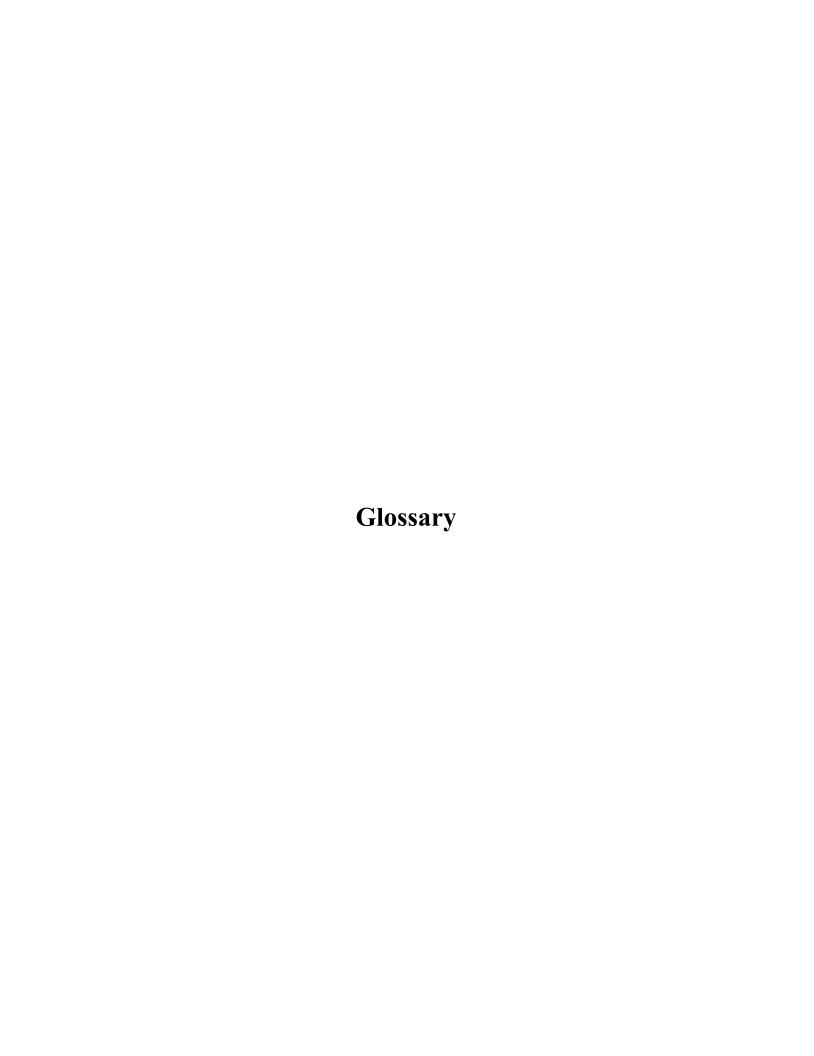
Source: South Dakota Department of Health

# Survey Results Compared to Vital Statistics Data

Both vital statistics and survey results show that the incidence of low birth weight increased if the mother smoked during pregnancy. However, the percent of mothers who smoked during their pregnancy has been slowly declining. This year 8.4 percent of survey participants that smoked while pregnant, is half (16.4 percent) of the mothers who indicated they smoked while pregnant during the 2003 survey.

The average age of the mothers in the survey was two years older then the average age of mothers from 1998 to 2004 determined by vital statistics data.

\* Low birth weight is babies weighing less than 5 pounds, 9 ounces.



# Glossary

**Baby Care/Case Management:** The Baby Care program is a cooperative effort between the Department of Health's Perinatal Program and the Department of Social Services' Medicaid program to provide case management services for high risk pregnant women. The goal of case management is to reduce maternal, neonatal, and infant mortality and morbidity in South Dakota. The purpose of the program is to assist pregnant women in obtaining needed services such as physician prenatal care, and to provide nursing services to promote a healthy pregnancy and positive birth outcome.

Community Health nurses assist clients in accessing medical care and other appropriate services, promote optimal health during pregnancy, and provide in depth prenatal education to foster positive pregnancy outcomes. The Community Health Nurse assists in coordinating care within the client's community to utilize those resources which are best suited to the client's needs.

**Body Mass Index (BMI):** Weight in pounds times 703 divided by height in inches squared.

BMI =	Weight (	lbs	) x	703
	Heig	ht <sup>2</sup> (	(in)	)

Ideal Weight Gain Recommendations (IOM*)			
Prepregnanc	y Weight Status	Ideal Weight Gain	
Very Underweight	(BMI < 18.0)	28 – 40 lbs	
Underweight	(BMI 18.0 - 19.7)	28 – 40 lbs	
Normal Weight	(BMI 19.8 - 26.0)	25 – 35 lbs	
Overweight	(BMI 26.1 – 29.0)	15 – 25 lbs	
Very Overweight	(BMI 29.0)	15 lbs at least	

<sup>\*</sup> Institute of Medicine

**FAS / FAE:** Fetal Alcohol Syndrome (FAS) is the name given to a characteristic pattern of severe birth defects caused by maternal alcohol consumption. For a diagnosis of FAS, at least one feature from each of three categories must be present:

- 1. Prenatal and postnatal growth retardation with abnormally small-for-age weight, length and/or head circumference.
- 2. Central nervous system disorders with signs of abnormal brain functioning, delays in behavioral development, and /or intellectual impairment.
- 3. At least two of the following abnormal cranio-facial features: small head, small eyes or short eye openings, poorly developed philtrum (the groove above the upper lip), a thin upper lip, a short nose, or a flattened midfacial area.

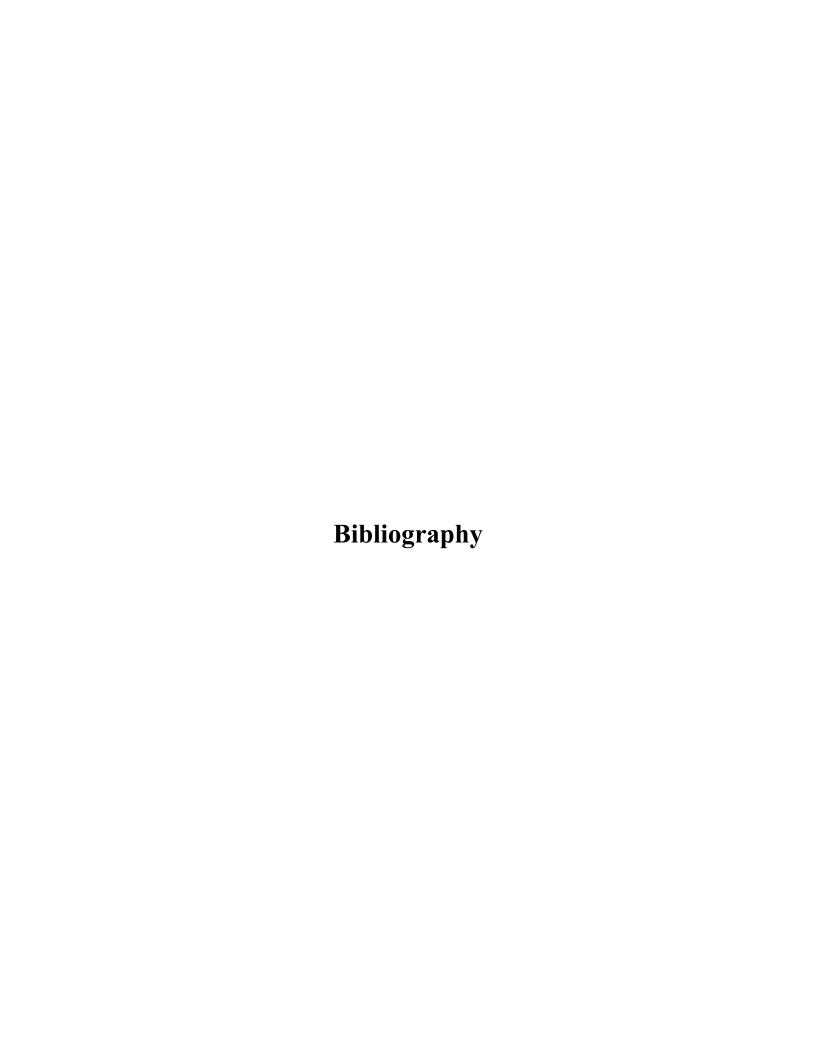
Prenatally alcohol-exposed babies with birth defects who do not meet all three criteria for an FAS diagnosis may be categorized as having suspected "fetal alcohol effects" (FAE). These adverse consequences of maternal alcohol use usually include growth retardation.

# Glossary

**Healthy People 2010:** A national agenda has been developed to challenge Americans to improve their health by the year 2010. Healthy People 2000: National Health Promotion and Disease Prevention Objectives, released in 1990, identified health improvement goals and objectives to be reached by the year 2000. The Healthy People 2010 initiative continues in this tradition as an instrument to improve health for the first decade of the 21st century.

**HIV** / **AIDS**: HIV (human immunodeficiency virus) is the virus that causes AIDS. This virus is passed from one person to another through blood-to-blood and sexual contact. AIDS stands for acquired immunodeficiency syndrome. An HIV-infected person receives a diagnosis of AIDS after developing one of the CDC-defined AIDS indicator illnesses. An HIV-positive person who has not had any serious illnesses also can receive an AIDS diagnosis on the basis of certain blood tests (CD4+ counts).

**WIC:** The Special Supplemental Nutrition Program for Women, Infants, and Children, better known as WIC is a USDA funded supplemental nutrition program for pregnant, breastfeeding and post-partum mothers, infants and children up to age 5. To qualify, the household income must be at or below 185 percent of the poverty level and there must be a nutritional risk.



# **Bibliography**

AVERT (AIDS Education & Research Trust). HIV, AIDS & Pregnancy. <a href="http://www.avert.org/pregnancy.htm">http://www.avert.org/pregnancy.htm</a> September 2005.

Child Abuse Prevention Council of Montgomery County, Inc. Never Shake a Baby! <a href="http://www.child-abuse.org/never.htm">http://www.child-abuse.org/never.htm</a>. Copyright 1997

Elecomm Corp. Toxoplasmosis (Toxo). http://www.obgyn.net/women/pregnancy/pb-toxo.htm 1999.

South Dakota Department of Health. Newborn Screening Program. <a href="http://doh.sd.gov/NewbornScreening/">http://doh.sd.gov/NewbornScreening/</a>.

United States Department of Agriculture, Food, and Nutrition. Drugs and Alcohol Can Hurt Your Unborn Baby. Washington, D.C.: 1990.

United States Department of Health and Human Services. Healthy People 2010 (Conference Edition, in Two Volumes). Washington, DC: January 2000.

United States Department of Transportation, National Highway Traffic Safety Administration. Seat Belt Use During Pregnancy. Washington, D.C.: 1985.

Kids Health for Parents, The Nemours Foundation. http://www.kidshealth.org/parent

Office on Women's Health in the Department of Health and Human Services, Publication date: April 2001. http://www.4woman.gov/faq/oral\_health.htm

Physical Activity During Pregnancy <a href="http://www.checkyourhealth.org/pa/pa\_pregnancy.htm">http://www.checkyourhealth.org/pa/pa\_pregnancy.htm</a> (with a link for workouts - <a href="http://www.checkyourhealth.org/pa/wow.htm">http://www.checkyourhealth.org/pa/wow.htm</a>) and more pregnancy information at <a href="http://pregnancy.about.com">http://pregnancy.about.com</a>.



# A Survey of Mothers in South Dakota

Wh	at is today's date?	6.	During the <b>three months before you were pregnant</b> did you use any of these drugs? For
Bal	by's Date of Birth:		each item, circle Y (Yes) if you used it or circle N (No) if you did not.
pre	re are two questions about <b>your recent regnancy</b> . Please check the box next to the best wer.		Y N a. Prescription drugs (If yes, what kinds?) Y N b. Marijuana (pot, bud) or hashish (hash)
1.	Was your baby born more than 3 weeks <b>before</b> its due date?		<ul> <li>Y N c. Amphetamines (uppers, speed)</li> <li>Y N d. Meth, ice, crystal, crank</li> <li>Y N e. Cocaine (rock, coke, crack)</li> </ul>
	Yes No		Y N f. Heroin (smack, horse) Y N g. Tranquilizers (downers, ludes) or hallucinogens (LSD/acid, PCP/angel dust, ecstasy)
2.	Did your baby weigh <b>less</b> than 5 pounds, 9 ounces at birth?		Y N h. Sniffing gasoline, glue, hairspray, or other aerosols
	☐ Yes ☐ No		
_	estions 3-7 are about the <b>three months before a became pregnant</b> with your new baby:	7.	During the <b>three months before you were pregnant</b> did you take a folic acid pill or multi- vitamin with folic acid? ( <i>Check one answer only</i> .)
3.	During the three months before you were pregnant did you smoke cigarettes?		☐ Yes ☐ No
	<ul><li>No, I did not smoke.</li><li>Yes, if yes check one response below:</li></ul>		Didn't know I should
	a. I smoked less than one cigarette a day. b. I smoked 1-9 cigarettes per day. c. I smoked 10-19 cigarettes per day. d. I smoked 20-29 cigarettes per day. e. I smoked 30-39 cigarettes per day. f. I smoked 40-49 cigarettes per day. g. I smoked 50 or more cigarettes per day.	8.	During the <b>three months before you were pregnant</b> , how often did you participate in any physical activity or exercise for a total of 30 minutes or more per day? (For example: walking, swimming, cycling, dancing or gardening.)  Less than 1 day per week 3 to 4 days per week 1 to 2 days per week 5 or more days per week
4.	On the average, during the three months before you were pregnant, how many days a	9.	What was your weight before you became pregnant?pounds
	week did you drink beer, wine, or liquor? If you did not drink at all, enter "0" days and skip to question 6.	10.	What is your height? feet inches
	Days a Week Less than 1 day a week	11.	What was your weight at time of delivery? pounds
5.	On the average, <b>how many drinks</b> of beer, wine, or liquor did you have on the days when you had a drink during the <b>three months before you were pregnant?</b> (A drink is: one glass of wine, one wine cooler, one can or bottle of beer, one shot of liquor, or one mixed drink).		

\_\_\_\_ Drinks a day

12. Pregnancy can be a difficult time for some women. This question is about things that may have happened <b>during the 12 months before your delivery. This includes the three months before you got pregnant.</b> For each event listed below, circle Y (Yes) if it happened to you or N (No) if it didn't.	15. When you got pregnant with your new baby, were you or your husband or partner using any kind of birth control? Examples of birth control are: the pill, condoms, diaphragm, foam, rhythm, natural family planning, shots, patches, or ANY other way to keep from getting pregnant.
<ul> <li>Y N a. A close family member was very sick and had to go into the hospital.</li> <li>Y N b. I separated from or divorced my</li> </ul>	No– (Go to Question 17)  16. Why were you or your husband or partner not using any birth control? <i>Check all that apply</i> .
husband or partner.  Y N c. I moved to a new address.  Y N d. I was homeless.  Y N e. My husband or partner lost his job.  Y N f. I lost my job even though I wanted	a. I wanted to get pregnant. b. I didn't think I could get pregnant. c. I had been having side effects from the birth control I used.
to go on working.  Y N g. My husband or partner and I argued more than usual.	d.I didn't want to use birth control. e. I didn't think I was going to have sex. f. My husband or partner didn't want to use birth control.
<ul> <li>Y N h. My husband or partner said he did not want me to be pregnant.</li> <li>Y N i. I had a lot of bills I couldn't pay.</li> <li>Y N j. I was involved in a physical fight.</li> <li>Y N k. My husband or partner or I went to</li> </ul>	use birth control.  g.I had problems obtaining birth control.  h.My religious beliefs do not allow it.  i. I couldn't afford birth control.  j. Other:
jail. Y N l. Someone very close to me had a bad	17. How many weeks or months pregnant were you when you had your first visit to a medical
problem with drinking or drugs.  Y N m. Someone very close to me died.	provider for prenatal care? (Don't count a visit that was only for a pregnancy test or receipt of prenatal vitamins.)
Here are a few more questions about your recent pregnancy:	weeks or months
13. How did you feel about becoming pregnant? <i>Check only one answer.</i>	☐ I didn't go for prenatal care  18. Here is a list of problems that some women have in getting prenatal care. Check all
<ul> <li>a. I wanted to be pregnant sooner</li> <li>b. I wanted to be pregnant later</li> <li>c. I wanted to be pregnant then</li> <li>d. I didn't want to be pregnant then or any time in the future.</li> <li>e. I was unsure how I felt about being pregnant.</li> <li>f. Other:</li> </ul>	responses that apply to you.  a. I had no way to get to the clinic or doctor's office.  b. I couldn't get anyone to take me as a patient.  c. My doctor's schedule was full.  d. I didn't know that I was pregnant.  e. I didn't have enough money to pay for my visits.  f. I didn't need to go so early because I'd been
14. Thinking back to just before you got pregnant with your new baby, how did the baby's father feel about you becoming pregnant? <i>Check only one answer</i> .	pregnant before and felt I knew what it was all about.  g. I didn't think early prenatal care was important.  h. I was waiting to qualify for Medicaid.
<ul> <li>a. He wanted me to be pregnant sooner.</li> <li>b. He wanted me to be pregnant later.</li> <li>c. He wanted me to be pregnant then.</li> <li>d. He didn't want me to be pregnant then or at any time in the future.</li> <li>e. It didn't matter to him when I became</li> </ul>	<ul> <li>i. I was waiting for my insurance to start.</li> <li>j. My doctor didn't want to see me until after I was 12 weeks pregnant.</li> <li>k. I didn't want anyone to know I was pregnant.</li> <li>l. I didn't have insurance.</li> <li>m. Other:</li></ul>
pregnant.  f. I don't know.	

19. Did anything keep you from having as <b>many</b> prenatal visits as you wanted?	22. Before, during or after your pregnancy did a doctor, nurse, or other health professional talk
	to you about, or provide printed information
□ No	on: Circle Y (Yes-at some point) or N (No-
Yes, if yes, check all responses below that apply.	Never) for each event.
	Y N a. Smoking
a. I had no way to get to the clinic or	Y N b. Chewing tobacco
doctor's office.	Y N c. Drinking alcohol
b. The office hours did not work with	Y N d. Physical abuse by husband/partner.
my schedule.	Y N e. HIV/AIDS
<ul><li>c. I didn't have enough money to pay for visits.</li></ul>	Y N f. Aspirin and other over-the-counter medicines
d. I had as many visits as the doctor	Y N g. Marijuana, crack cocaine, meth-
felt were necessary (I wanted more).	amphetamine or other street drugs
e. My baby was premature.	Y N h. Not changing cat litter
f. Bad weather prevented me from	Y N i. Thoroughly cooking meats
getting to the clinic or doctor's office.	Y N j. Avoiding paint fumes, other
g. I couldn't get time off from work.	chemicals and radiation
h. Other:	Y N k. Wearing seat belts
	Y N l. Possible family history of birth
20. During your recent pregnancy, did any of the	defects
following happen to you? Circle Y for Yes or N	Y N m. Preterm labor signs
for No.	Y N n. What I should eat
joi ito.	Y N o. What my baby should eat
Y N a. Your husband or partner threatened	Y N p. Breastfeeding my baby
you or made you feel unsafe in	Y N q. How smoking around my baby
some way.	could affect his/her health
Y N b. You were frightened for the safety	Y N r. Parenting classes
of yourself or your family because	Y N s. How shaking a baby can cause brain
of the anger or threats of your	damage
husband or partner.	Y N t. Laying my baby down to sleep on
Y N c. Your husband or partner tried to	his/her back or side, not on the
control your daily activities, for	stomach
example, controlling who you could	Y N u. Using a car safety seat for my baby
talk to or where you could go.	Y N v. Other safety tips (cribs, baby
tark to or where you could go.	walkers, playpens, etc.)
	Y N w. The importance of folic acid in food
21. Did you have any of the following before or did	or vitamin pills to prevent birth
they develop during pregnancy? Check all that	defects
apply.	Y N x. Immunizations/baby shots
ирріу.	Y N y. How to care for my teeth and gums.
Before During	Y N z. Importance of physical activity
	Y N aa. Newborn metabolic screening
	1
	Y N bb. Newborn hearing screening
☐ ☐ c. Epilepsy ☐ ☐ d. Inflamed gums	23. How long has it been since you last visited a
	dentist or a dental clinic?
☐ ☐ e. Asthma☐ f. STDs	defitist of a defital effilic?
	a. Within the past year.
☐ ☐ g. HIV/AIDS ☐ h. Other:	b. Within the past years.
i. I did not have any of the above	c. Within the past 5 years.
i. I did not have any of the above conditions.	d. 5 or more years ago.  e. Never
conditions.	e. Never  f. Don't Know
	I. DOII I KNOW

24.	Did you have any problems with your teeth or gums during your most recent pregnancy?	28.	How was your prenatal care/delivery paid for? <i>Check all that apply</i> .
	□ No □ Yes − If yes, were you able to see a dentist for treatment? □ Yes □ No  How long has it been since you had your teeth "cleaned" by a dentist or dental hygienist? □ a. Within the past year.		a. Personal income (cash, check or credit card)  b. Insurance  c. Medicaid – full coverage  d. Medicaid – pregnancy only program  e. Indian Health Service  f. Military  g. I still owe  h. Other:
26.	b. Within the past 2 years. c. Within the past 5 years. d. 5 or more years ago. e. Never f. Don't Know  During your pregnancy, were you on any of these programs? Check all that apply.	29.	During the <b>last three months of your pregnancy</b> , how often did you participate in any physical activity or exercise for a total of 30 minutes or more per day? (For example: walking, swimming, cycling, dancing or gardening.)
	<ul> <li>a. WIC (Nutrition Program for Women, Infants and Children)</li> <li>b. Baby Care/Case Management</li> <li>c. Healthy Start &amp; Bright Start home visits</li> <li>d. Food Stamps</li> <li>e. Medicaid – full coverage</li> </ul>		☐ Less than 1 day per week ☐ 1 to 2 days per week ☐ 3 to 4 days per week ☐ 5 or more days per week ☐ I was told by a doctor, nurse or other health care worker not to exercise.
	f. Medicaid – pregnancy only program g. Indian Health Service (IHS) h. Temporary Assistance for Needy Families (TANF) i. Other - Please list: j. I was not in any of the programs listed above.	30.	Which statement describes your tobacco (cigarettes or chew) use <b>during</b> pregnancy? Check only one answer.   a. I stopped as soon as I knew I was pregnant.  b. I stopped later in my pregnancy.  c. I tried to stop, but couldn't.
27.	Which three of these were the most useful in educating you about your pregnancy and how to take care of yourself?  a. Prenatal Classes b. My doctor	31.	d. I decreased my tobacco use. e. I didn't use tobacco. f. I increased my tobacco use. g. I started using tobacco.  If you used tobacco (cigarettes or chew) during
	<ul> <li>c. Clinic nurse</li> <li>d. Midwife</li> <li>e. Packet of information handed out at the doctor's office or clinic</li> <li>f. New Beginnings Prenatal Newsletter</li> <li>g. Healthy Start Staff or Bright Start home visits</li> </ul>	31.	your pregnancy, did your healthcare provider: (circle your answer) a. Advise you to quit? b. Refer you to a telephone quit line or other quit tobacco program?  Yes or No Yes or No
	h. WIC Staff i. Public Health Nurse/Community Health Nurse/Baby Care Nurse j. Family and friends k. Books, magazines and other information that I found for myself l. Internet m. My previous experiences with pregnancy n. My education/profession	32.	Are you smoking now?  Yes No
	o. Other:		

33.	Which statement best describes the smoking behaviors of you, your family, friends, and daycare provider or babysitter around the baby? <i>Check only one answer.</i> a. No one smokes in the house or car at all.	38. Which <u>three</u> of these were most helpful to you in learning to care for your baby?   a. Talking with my child's doctor  b. Clinic nurse  c. A packet of information handed out
	b. No one smokes in the house when the baby is there.  c. No one smokes in the same room when	at my doctor's office  d. Classes (Prenatal, Breastfeeding, Parenting)
	the baby is there.  d. No one smokes in the car when the baby is there.	e. Hospital staff  f. WIC staff  g. Public Health Nurse/Community
	<ul><li>e. Smoking is allowed anytime, anywhere in the house or car.</li><li>f. Other:</li></ul>	Health Nurse/Baby Care Nurse  h. Family and friends  i. Healthy Start Staff or Bright Start
34.	Secondhand smoke increases a baby's risk of dying from Sudden Infant Death Syndrome (SIDS).	home visits  j. My own study of books, pamphlets, videos, etc.  k. Internet
	☐ True ☐ False	Experience with my other child/     children     m. My education/profession
35.	Which statement described your alcohol use during your pregnancy?	n. Other:
	a. I stopped as soon as I knew I was pregnant.	Now we would like to ask you about how things went after your baby came home from the hospital.
	<ul> <li>b. I stopped later in the pregnancy.</li> <li>c. I tried to stop, but couldn't.</li> <li>d. I decreased my alcohol use.</li> </ul>	39. How old was your baby when she/he came home from the hospital? <i>Check only one response</i> .
	<ul> <li>e. I never used alcohol.</li> <li>f. I increased my use of alcohol.</li> <li>g. I started using alcohol.</li> </ul>	a. less than 12 hours old b. 12-24 hours old c. 25-48 hours old d. more than 48 hours old
36.	Did you attend	e. My baby is still in the hospital (Go to question 58)
	Prenatal Classes Yes No	f. My baby was adopted (Go to question 58)
	Breastfeeding Yes Classes No	g. My baby was born at home (Go to question 41)
	Parenting Classes Yes No	40. Did your baby ride home from the hospital in an infant car safety seat?
27	Was your haby?s bassing sames 49	Yes No
37.	Was your baby's hearing screened?  a. Before leaving the hospital. b. Within one month of birth.	41. Where did you get the car safety seat you are now using for your baby? <i>Check only one answer</i> .
	<ul> <li>c. After one month of age.</li> <li>d. Never screened.</li> <li>e. Don't know.</li> </ul>	<ul> <li>a. Purchased or received new for this baby</li> <li>b. Purchased or received used for this baby</li> <li>c. Had one from another of my babies</li> <li>d. We do not use a car safety seat (go to question 43)</li> </ul>

42. How did you learn about the proper use of your car seat? Check all that apply.  a. Video b. Family or friend c. Written instructions d. Health care professional e. No one f. Certified child passenger safety technician. Other:	47. How old was your baby when you first fed solid foods?  a. 4 weeks or less (one month or less)  b. 5-8 weeks (one to two months)  c. 9-12 weeks (two to three months)  d. 13-16 weeks (three to four months)  e. 17-20 weeks (four to five months)  f. 21-24 weeks (five to six months)  g. More than 24 weeks (six months or older)  h. My baby is not eating solid foods yet.
43. Were you visited at home by someone from Public Health, Community Health, the hospital, Bright Start, or Healthy Start Program?  No Yes, if yes check one response below:  a. Baby was less than 1 week old b. Baby was more than 1 week old, but less than 2 weeks c. Baby was more than 2 weeks old	<ul> <li>48. In what position do you most often lay your baby down for sleep? <i>Check only one answer</i>.  □ a. Stomach □ b. Back □ c. Side</li> <li>49. Why did you choose this sleeping position for your baby? <i>Check all that apply</i>. □ a. Doctor or nurse at clinic suggested it.</li> </ul>
<ul><li>44. Did you breastfeed your baby at time of discharge from the hospital?</li><li>☐ Yes</li><li>☐ No (go to question 46)</li></ul>	b. WIC staff suggested it.  c. A Public Health Nurse/Community Health Nurse suggested it.  d. A family member or friend suggested it.  l read about it in a magazine, newspaper
45. Are you still breastfeeding your baby at least once a day?  Yes No, if no, how many weeks or months did you breastfeed?  Weeks OR Months Less than 1 week	or baby care book.  f. I heard about it on TV or radio.  g. This is the way my other children slept.  h. I sleep in this position.  i. I was afraid of vomiting/spitting up /choking.  j. Bright Start/Healthy Start home visits.  k. Other – Please tell us why:
<ul> <li>46. Did any of these things stop you from breastfeeding? Check all that apply.</li> <li>a. I just didn't want to breastfeed.</li> <li>b. Difficult to schedule breastfeeding around work or school.</li> <li>c. Difficult to find a place to use a breast pump or feed my baby at work, at school, or in the community.</li> <li>d. I tried but my baby didn't breastfeed very well.</li> <li>e. I didn't think I had enough milk.</li> <li>f. Breastfeeding was too painful.</li> <li>g. Breast surgery prevented me from breastfeeding.</li> </ul>	50. Where does your baby usually sleep at night?  Check only one answer.  a. Crib, standard size  b. Bassinet, cradle  c. Portable crib  d. Adult bed  e. Playpen  f. Infant or car safety seat  g. Other:  51. What type of material is usually under the baby when sleeping? Check all that apply.  a. Mattress, firm  h. Blankets  b. Foam pad  i. Rug
<ul> <li>h. Baby preferred the bottle.</li> <li>i. There was no one to help me with my breastfeeding problems.</li> <li>j. My baby was not with me.</li> <li>k. I think it's better for my baby to be bottle-fed.</li> <li>l. I was taking medicine.</li> <li>m. I felt it was time to stop.</li> </ul>	c. Mattress pad j. Cushion d. Sheet k. Sheepskin e. Water bed l. Beanbag f. Sleeping bag m. Featherbed g. Pillow n. Other:
n. My partner/family didn't want me to breastfeed.  o. I was embarrassed about breastfeeding in front of others.  p. Other:	52. How often does your new baby sleep in the same bed with you or anyone else?  Always Often Sometimes Rarely Never

53.	How many times has your baby been to a medical provider for <b>routine well baby check-ups</b> (check-ups when your baby was not sick)?	56. When traveling in a vehicle are you using a car safety seat for your baby?
	☐ 0 times ☐ 1 time ☐ 2 times	☐ Always Answer 57 A ☐ Sometimes Answer 57 A and 57 B ☐ Never Answer 57 C
	☐ 3 times ☐ 4 times ☐ 5 times or more	57. <b>A</b> . If Always or Sometimes, how does the baby ride when traveling in a vehicle? <i>Check the answer that applies most of the time.</i>
54.	Did anything keep you from taking your baby to the medical provider for routine well baby care?  No.  Yes, if yes check all that apply from the responses below:  a. I had no insurance and didn't have enough money to pay for visit.  b. My insurance wouldn't pay for it.  c. My insurance pays some, but I can't afford to pay the rest of the cost.  d. I couldn't get an appointment.  e. I had no way to get the baby to the doctor or clinic.  f. I didn't have anyone to take care of my other children.  g. I didn't know when to bring my baby back to the doctor.  h. Bad weather prevented me from taking my baby to the doctor.	□ a. In the front seat facing backwards (safety seat faces back of vehicle).         □ b. In the front seat facing forwards (safety seat faces windshield).         □ c. In the back seat facing backwards (safety seat faces back of vehicle).         □ d. In the back seat facing forward (safety seat faces windshield).         57. B. If Sometimes, why aren't you always using a car safety seat? Check all that apply.         □ a. Sometimes baby is crying.         □ b. Sometimes baby requires feeding or a diaper change.         □ c. Sometimes takes too much time.         □ d. Other:
	<ul> <li>i. I don't believe well baby care is necessary.</li> <li>j. My child is frequently sick and seen by a doctor.</li> <li>k. Other - please tell us:</li></ul>	57. C. If Never, why aren't you using a car safety seat? Check all that apply.  a. Can't afford one.  b. Don't believe they are necessary.  c. My baby doesn't like riding in one.  d. The car safety seat is inconvenient to use
55.	Did any of these things keep you from getting medical care for your baby when he or she was sick?	e. Other:
	<ul> <li>No, nothing kept us from medical care when our baby was sick.</li> <li>No, my baby has not been sick</li> <li>Yes, if yes check all that apply from the responses below: <ul> <li>a. I had no insurance and didn't have enough money to pay for visit.</li> <li>b. My insurance wouldn't pay for it.</li> <li>c. My insurance pays some, but I couldn't afford to pay the rest.</li> <li>d. I couldn't get an appointment.</li> <li>e. I had no way to get my baby to the doctor or clinic.</li> <li>f. Bad weather prevented me from taking my baby to the doctor.</li> <li>g. I didn't have anyone to take care of my other children.</li> </ul> </li> </ul>	58. Where do you go most of the time for your birth control or family planning services? Check only one answer.  a. Family Planning Program/Clinic  b. Private Physician/Clinic  c. Community Health Center  d. USD Residency Program  e. Indian Health Service  f. Military Health System  g. Over-the-counter (condoms, foams, etc.)  h. I don't go anywhere, I've had my tubes tied or my husband or partner has had a vasectomy  i. I'm using natural family planning, so don't go anywhere  j. I'm not using any kind of birth control  k. Other:
	h. Other - please tell us:	

Nov	w, just a few final questions:	
	How many people are in your household?  Total number of people  How many are 17 years or younger?  What is the highest level of education that you	65. What is your race? Check one or more races to indicate what you consider yourself to be  a. White  b. Black or African American  c. American Indian or Alaskan Native Name of enrolled or principal tribe:
60.	What is the highest level of education that you and the baby's father have completed?  Mother Father	d. Asian Indian e. Japanese f. Native Hawaiian g. Chinese h. Korean i. Guarmanian or Chamorro j. Filipino k. Vietnamese l. Samoan m. Other Asian – print race  Other Pacific Islander – print race
61.	What is your age? Years	o. Some other race – print race
62.	What is the age of the baby's father? Years	66. Are you of Hispanic origin?
63.	Give the name of South Dakota county in which you live County	☐ Yes ☐ No
64.	What is your annual household income before taxes and other deductions?  □ a. Under \$10,000 □ b. \$10,000 - \$19,999 □ c. \$20,000 - \$29,999 □ d. \$30,000 - \$39,999 □ d. \$40,000 - \$49,999 □ f. \$50,000 or More □ g. Don't Know	